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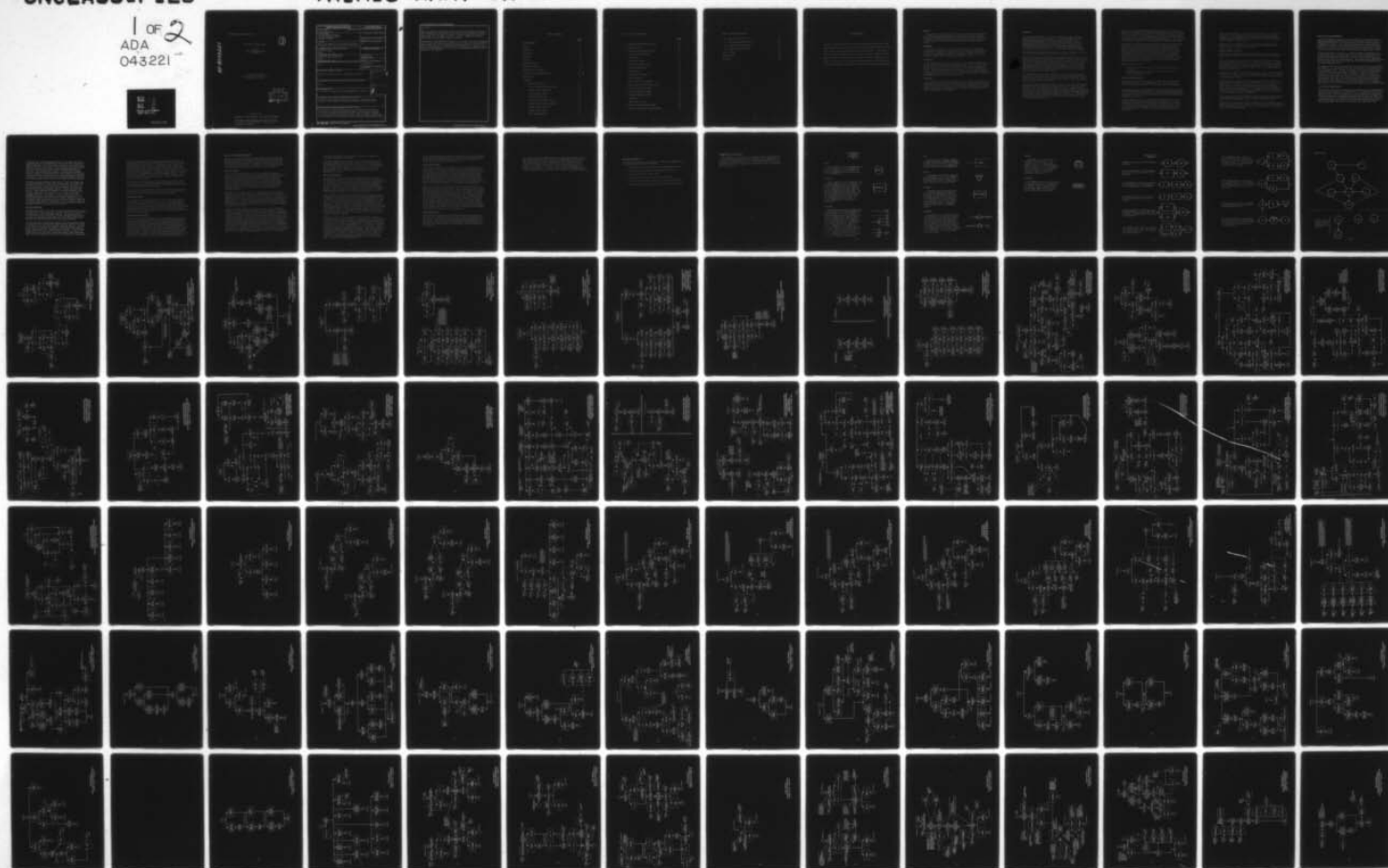
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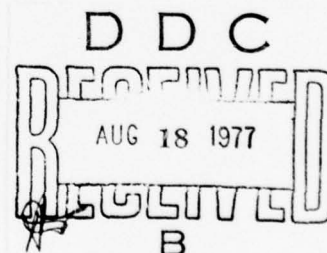
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FOOD AND NUTRITION SERVICE

PROCESS
CONDITION-ACTION DIAGRAM
FLOWCHARTS

US ARMY TRIMIS AGENCY
WALTER REED ARMY MEDICAL CENTER
WASHINGTON, DC 20012



November 1976

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There is a wide diversity in Food Service operations throughout the military medical departments. The intent of the system is to be relatively comprehensive. Therefore, the TRIMIS FS subsystem includes features that may not be implemented at all treatment facilities. However, a subset of the system should suffice for any given treatment facility.

The objective of the TRIMIS FS subsystem is to provide a food service management and technical information system responsive to the needs of both the dietitian and the physician: to the dietitian, by supplying accurate, timely data on which to base management decisions; and to the physician, by supplying complete patient dietary information as it is needed in the diagnosis of disease and treatment of the patient.

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PURPOSE:

The purpose of the Food Service (FS) System condition-action flowcharts is to present in easily understandable graphic form the major processing involved in an advanced Food Service system. The FS system is intended to provide the Food Service portion of the health care support systems which are the mission of the Tri-Service Medical Information System (TRIMIS) project.

BACKGROUND.

There is a wide diversity in Food Service operations throughout the military medical departments. The intent of the system is to be relatively comprehensive. Therefore, the TRIMIS FS subsystem includes features that may not be implemented at all treatment facilities. However, a subset of the system should suffice for any given treatment facility.

LIMITATIONS:

The reader must not at this time expect to find a hospital Food Service Division which operates exactly as described herein. This is because the FS System charted here included more capabilities than, and is a superset of, any known system at the time of this writing. The system presented here is in fact, a technology-independent description of the full TRIMIS FS System design. However, the internal details of routine processes such as production of reports are not presented here, as the condition-action diagram format is an inappropriate medium for that type description.

OBJECTIVES:

The objective of the TRIMIS FS subsystem is to provide a food service management and technical information system responsive to the needs of both the dietitian and the physician: to the dietitian, by supplying accurate, timely data on which to base management decisions; and to the physician, by supplying complete patient dietary information as it is needed in the diagnosis of disease and treatment of the patient.

OVERVIEW:

The Food Service Subsystem, is composed of twelve (12) major functions grouped into five (5) major categories: the CLINICAL SUPPORT functions (Clinical Support-Inpatient and Clinical Support-Outpatient), the RESOURCE MANAGEMENT FUNCTIONS (Local Data Base Maintenance, Financial Management, Personnel Management, and Quality Control Management), the FOOD PRODUCTION functions (Menu Item Preparation Scheduling, Inventory Control, and Menu Item Preparation), the FOOD SERVICE functions (Patient Tray Assembly and Dining Room Service), and CENTRAL DATA BASE MAINTENANCE.

The general interrelationships between the Food Service Subsystem functions, and the interfaces between these functions are shown in Figure 1.

Both Clinical Support-Inpatient and Clinical Support-Outpatient rely on the Ward/Clinic and Patient Administration Subsystems for patient identification, registration, medical record availability and completeness, and the diet order. The Clinical Support-Inpatient function needs these subsystems for patient location. The Clinical Support-Outpatient function relies on the Patient Administration Subsystem for eligibility determination, and on the Patient Appointment Subsystem for Nutrition Clinic appointments. These functions also rely on each other for dietary record data, for patients who transfer between outpatient and inpatient status.

The remainder of the Food Service Subsystem functions exist to support the two Clinical Support functions. The Central Data Base Maintenance function, which operates outside the environment of any individual hospital, provides recipes, nutritive values, and a Hospital Master Menu to the Local Data Base Maintenance function of each hospital.

The Local Data Base Maintenance function, as well as the other three Resource Management functions, support all other functions of the Subsystem, without exception. The Local Data Base Maintenance functions provide versions of the Central Data Base Maintenance function data bases, tailored to meet local requirements, to other functions as needed. The Financial Management function keeps financial records and provides budgetary guidance. The Personnel Management function monitors personnel schedules for all functions. The Quality Control Management function maintains procedures and other quality control mechanisms for all functions.

The Menu Item Preparation Scheduling function assures that the correct quantity of each menu item is scheduled for production in a timely fashion. Based on these schedules, the Inventory Control function is used to procure the raw ingredients for the menu items, and maintains a perpetual inventory of amounts on hand. These are withdrawn from inventory as needed for menu item preparation through the Menu Item Preparation function. The menu items are produced, and provided to the Inventory Control function for storage.

The Patient Tray Assembly and Dining Room Service functions withdraw the prepared menu items from inventory as they are needed for service. The Patient Tray Assembly function interfaces with the Clinical Support-Inpatient function, which provides the menu item selections for each individual patient eating on the nursing unit. Trays for each patient are assembled and turned over the Logistics Subsystem for delivery to the nursing unit. While meal service progresses in the Dining Room, headcount is taken of individuals entering. This headcount data, with other shortage/leftover information from both Service functions, is provided to the Local Data Base Maintenance and/or Financial Management functions for review and follow-up.

Expected Benefits include:

- o Improved utilization of personnel, equipment, and professional resources.
- o Increased capability to respond to the needs of the patient.
- o Greater Improved food quality.
- o Improved food quality.

CLINICAL SUPPORT-OUTPATIENT

These processes encompass the sequence of events that take place within the Nutrition Clinic in providing nutritional care to outpatients from the time the patient enters the clinic until the patient departs.

As the Nutrition Clinic is a referral clinic, most patients are appointed by PATIENT APPOINTMENT SCHEDULING (PAS); however, procedures for appointment of patients who have bypassed PAS and procedures for reappointment of those patients who have been appointed but for some reason require a new appointment are included.

Patients appointed for initial diet instructions/counselling must have a consult form from a care provider with the appropriate diet order. Procedures for obtaining a diet order when no consult form is available are included. The medical record is normally required for each patient visit. Procedures are included to handle those situation where the medical record is not available but diet instructions/counselling must be provided.

Evaluation and validation of a diet order by the dietitian are included in this function. The information required for performing the diet order evaluation is collected through the completion of the dietary record which includes a medical record review or update process and a patient dietary history recording or update process.

Procedures for the documentation of each visit in appropriate patient records and for the initiation of any referral and/or follow-up actions required are also included in this function.

CLINICAL SUPPORT - INPATIENT

These processes encompass the sequences of events that take place from the time of patient admission to patient discharge as regards to nutritional care.

Initial diet order receipt (or diet order change notification) and evaluation and validation of a diet order are included in this function. As diet order validation may be time-critical in the inpatient setting, procedures are included to allow for provisional one-meal diet orders and unvalidated one-meal diet orders in the event validation cannot be completed within a meal service time frame.

In addition to a medical record review and patient dietary history recording, patient food tolerances recording (or update where appropriate) is included as a part of the dietary record to ensure that each patient receives appropriate food items at meals.

All menu selection actions required to provide patient meals either by patient selection or selection for the patient by Clinical Dietetics Branch personnel are accomplished in this function. Menus are processed in a timely manner to allow for Patient Tray Assembly function preparation of all items needed for tray service (to include those items identified as additional menu item requirements). Cart Loading Guides are also prepared for use by both the Patient Tray Assembly function and Logistics Subsystem in food cart loading, delivery, and service.

Tray service sequences as accomplished by Clinical Dietetics Branch personnel on the ward are also included in this function. Procedures for recording patient specific information relating to food intakes are provided.

Discharge notification and the actions required to cancel prepared meals and advance menu selections are included in this function, as is the documentation of the nutritional care during the patient stay (disposition of the dietary record upon patient discharge).

CENTRAL DATA BASE MAINTENANCE

This function operates outside the specific control of any one Army Medical Department (AMEDD) medical facility, and provides recipe, nutritive value, and Hospital Master Menu data bases (and updates to those data bases) initially to WRAMC and ultimately (as an incremental enhancement) to other implemented AMEDD medical facilities. The interface between this function and the medical facility is the Local Data Base Maintenance (LDBM) function, which is responsible for reviewing the data bases and providing local augmentation to them.

The recipe data base is composed of a standard preparation instruction set, a standard ingredient list, and standard list of can sizes, abbreviations, etc., as well as the recipes themselves, which utilize those standard lists. The nutritive value data base is composed of raw data for each recipe ingredient and nutritional value of recipes and menus. The Hospital Master Menu data base includes regular and modified diet menus for the menu cycle, specialty meals and holiday meals/menu items.

As change requests come into this function, they are reviewed for completeness and validity. If incomplete/invalid, they are returned to the requesting facility for further action. Changes may reference the recipe, nutritive value, or Hospital Master Menu data bases. A change to one data base usually affects one or more of the other data bases for example, a change to a recipe may change its nutritive value, and hence the nutritive value of each menu on which the recipe has been used. Therefore, all changes must be fully cross-checked between data bases, as well as within the data base being changed, to assure that a change beneficial to one data bases does not impair others. When a group of data base update data has been processed, it is forwarded to each medical facility, with a description of the updating which has taken place.

LOCAL DATA BASE MAINTENANCE

This function is the interface point between the Central Data Base Maintenance function and the functions of the subsystem which run under the control of the medical facility. Within this function lies the responsibility of initially establishing the data files provided by the Central Data Base Maintenance function and initiating the corresponding/supplementary local data for those files. As system operation is initiated and continues, this function also includes processing of update data from the Central Data Base Maintenance function, as well as update data from within the Food Service, for those data files.

To initiate the local data bases provided from the Central Data Base Maintenance function, determination is made of the menu items from the Hospital Master Menu to be used locally, creating a Local Master Menu. Based on that menu, the recipes to be used are selected, and the ingredients to be used in them selected, where optional ingredients are available. The recipes and menu items are nutritionally analyzed, using the nutritive value data provided. If nutritionally adequate, inventory records are initiated for each raw ingredient to be procured, as well as for each prepared menu item. Menus are printed for patient distribution, and provided to the Clinical Support-Inpatient function; and dining room menus are provided to the Dining Room Service function.

As system operation progresses, both specific "hard" data changes and operational feedback, or "soft" data, are processed. The "soft" data are analyzed, and specific changes to be made to the data bases, if any, are identified. "Hard" data (specific changes) can arrive from the Central Data Base Maintenance function, or from within the Food Service. These changes are processed on a schedule compatible with the daily operation of the Food Service (i.e., they do not have to be processed immediately upon arrival). Like the Central Data Base Maintenance function, all changes to an individual data base must be cross-checked against other data bases to assure compatibility, including data bases maintained by other Food Service Subsystem functions (e.g., Menu Item Preparation Scheduling). Some "hard" data changes are the update responsibility of the Central Data Base Maintenance function, and are provided to that function for processing.

FINANCIAL MANAGEMENT

The processes included in this function are triggered by specific events--scheduled events, such as updating of census forecast data; and arrival of documents for costing and budget updating. The major processes include recipe costing, determining food and expendable supply purchase and issue cost estimates, maintaining records of rations served, and preparing and updating long and short range census forecasts.

The census forecasts are developed from the daily and cumulative records of meals served in the dining room (headcount data) and the diet census for inpatients, from the Clinical Support Inpatient function. The long range forecast is developed to support the raw ingredient procurement cycles, as provided by the Inventory Control function. The short range census forecast is a more accurate forecast, developed 2-3 days prior to menu item service from more current census data. These census forecasts are used by appropriate functions in developing daily requirements.

This function processes both procurement and issue requisitions. All procurement requisitions are released through this function following fund availability certification. This includes a cost projection for the requisition, which is posted to "obligated funds". Requisitions showing actual receipts of raw ingredients (and prepared menu items) are also costed. Actual costs are posted, and the obligated fund information is updated accordingly. A cumulative receipt record is maintained for each raw ingredient/prepared menu item/expense supply to assist in verifying the Inventory Control function physical inventory. Issues from the inventory are costed and posted to a cumulative withdrawal record, for the same purpose.

Headcount data from the Dining Room Service function and beds-occupied data from the Patient Administration Subsystem provides the basis for the computation of rations served, which is the figure used to authorize food expenditure within the Food Service.

Recipes are costed periodically to provide an inventory line item price for prepared menu items, which must be maintained to support the sale of such menu items to other medical facilities in the area.

PERSONNEL MANAGEMENT

The processes of this function include those for maintaining employee duty schedules and checking employees in and out. The hours worked data for each employee will be available for civilian pay purposes. At the time of employee check-in, the Quality Control Management function will provide each employee with information regarding internal operating procedures which have changed, that are pertinent to his duties. Each employee will receive a copy of his time and attendance information for his own personal records.

QUALITY CONTROL MANAGEMENT

This function will include support for the food technology laboratory, and be the control point for Food Service internal operating procedures. Based on inventory information from the Inventory Control function, the production schedule from the Menu Item Preparation Scheduling function, and the menu being served from the Local Data Base Maintenance function, the requirements for food samples to be taken and tested in the food technology laboratory are generated, governed by appropriate food safety guidelines. Records of the results of those tests will be maintained. A file of internal operating procedures will be maintained. These will be categorized to identify the group(s) of employees to which each applies, for interface with the Personnel Management function.

MENU ITEM PREPARATION SCHEDULING

Based on the census forecasts generated through Financial Management function operation, and the recipes and menus from the Local Data Base Maintenance function, the number of servings needed of each menu item for each day of the menu cycle is computed. The schedule to be used in preparing these menu items is developed, to meet ingredient procurement schedules provided through the Inventory Control function.

INVENTORY CONTROL

All processes included in this function are triggered by specific events -- scheduled events (such as a predetermined procurement schedule) and document arrival for processing from other functions, primarily the Menu Item Preparation, Patient Tray Assembly, and Dining Room Service functions. The other major internal interface is with the Financial Management function, which serves as the Inventory Control function monitor. The major processes of this function include food and expendable supply procurement action, and the maintenance of a perpetual inventory for raw ingredients, prepared menu items, and expendable supplies.

Procurement of expendable supplies is accomplished from stock levels established for each such supply, on a schedule provided by the Logistics Subsystem. Requisitions are prepared and provided to the Financial Management function for costing and released to Logistics. Some expendable supply items are received from Logistics on an automatic resupply basis. The quantities to be automatically resupplied are reviewed periodically, and adjusted with Logistics when required. Receipt of automatic resupply items is also noted, and information is provided to the Financial Management function for costing.

Procurement of raw ingredients is normally done on a pre-established schedule, as supplies by the Commissary. However, emergency requisitions are also handled when required. The normal procurement cycle includes raw ingredients ordered 1-2 days in advance of need, raw ingredients ordered 60-75 days in advance of need, and raw ingredients ordered on other cycles in between those two. The quantities of each raw ingredient needed, for the appropriate procurement cycle, are developed using one of three methods: ingredient quantities are computed based on recipes and the production schedule, ingredient quantities are computed based on a normal procurement period usage, or ingredient quantities are computed based on a combination of recipe usage and normal procurement period usage. In all cases any excesses on hand or shortages in the inventory are incorporated in the quantity ordered. The inventory data is updated to reflect the amount due in, as well as its anticipated withdrawal from the inventory on a daily basis.

Anticipated withdrawals are maintained to provide the capability of projecting storage space availability.

A perpetual inventory is maintained. Actual raw ingredient/prepared menu item/expendable supply receipts are posted to the inventory, as are withdrawals from the inventory. Periodically, on a scheduled basis, a physical inventory is taken, to assure the accuracy of the inventory data. Results of that inventory are turned over to the Financial Management function for identification of significant errors and determination of cause.

MENU ITEM PREPARATION

The processes included in this function include the cycle of events which must take place to accomplish any single day of menu item production in the facility. Operation of this function assumes the availability of 1) the Menu Item Production Schedule, from the Menu Item Preparation Scheduling function, 2) current inventory data, from the Inventory Control function, and 3) recipes, from the Local Data Base Maintenance function. The major functional outputs from this function are prepared menu items, which are placed in inventory chilled or frozen, and are hence available for future use by various service areas.

Menu item preparation for any given production day encompasses production schedules for a variable number of days in advance (the number of days is stable for an individual hospital but varies among hospitals). Some menu items on the advance schedules require that ingredients be issued prior to the production day for thawing, or for pre-production of some ingredients. Advance schedules are reviewed, and recipes requiring advance processing are identified and extended to the quantities required. These extended advance recipes are reviewed daily to identify any production quantity changes. If production quantity changes have occurred, appropriate action for issue of additional ingredients or incorporation of excess ingredients is taken. All recipes for the production day being processed are extended.

Using those recipes, the total quantity of each ingredient needed is computed, and totals are converted to issue quantities. The requisition is then sent to the Ingredient Room for adjustment reflecting quantities on hand. Ingredient labels and Ingredient Room worksheets are prepared. If the recipe is to leave the Ingredient Room, it is added to a Delivery Schedule which specifies when and where it is to be delivered. Other production worksheets are prepared as required, with packaging worksheets for bulk and individual portioning requirements. When the requisition is returned from the Ingredient Room, reflecting amounts on hand there, inventory data is reviewed to assure the availability of needed raw ingredient. Assuming availability, the requisition is released for issue action to the Inventory Control function, and the needed ingredients are delivered to the Ingredient Room.

On the production day, processing and production is carried out according to the documents previously produced. Prepared menu items generated are turned over to the Inventory Control function, where they then become accountable inventory items available for use.

PATIENT TRAY ASSEMBLY

The processes of this function include the cycle of events which must take place to accomplish the preparation of trays for individual patients, for any given day. Operation of this function assumes the availability of 1) menu data, from the Local Data Base Maintenance and Menu Item Preparation/Scheduling function. 2) inventory data, from the Inventory Control function, and 3) from the Clinical Support-Inpatient function, specific menu requirements for each individual patient and notification of items needed that are not on the official menu for that day. The processes described apply equally to trays served at standard meal periods and to trays served, as required, for in between meal nourishments.

Processing to support any given service day is initiated 48 hours in advance of that day, with the issue of items requiring 48 hours to thaw from the prepared menu item inventory. Census data changes are evaluated, and quantities needed recomputed if required. The requisitions for those items are then prepared and released for issue, with labels to identify them in temporary storage. The following day, items requiring 24 hours to thaw, and items to be drawn from chilled storage are identified and requisitioned, following essentially the same procedures. Just prior to each meal, individual patient menu selections are received from the Clinical Support-Inpatient function, and trays are assembled to those specifications. Menu items not on the official menu are also identified by that function, and supplied to the Assembly function for acquisition. Trays are loaded into carts, and the carts are turned over to the Logistics Subsystem for delivery to the nursing units.

DINING ROOM SERVICE

The processes in this function include the cycle of events which must take place to accomplish the service of menu items in the dining room, for any given day, including the procedures for taking headcount in the dining room. Operation of this function assumes the availability of 1) menu data, from the Local Data Base Maintenance and Menu Item Preparation Scheduling functions and 2) inventory data, from the Inventory Control function.

Like the Patient Tray Assembly function, processing for any given service day is initiated 48 hours prior to service, and follows the same procedures for requisitioning and issue. Instructions for the reheating of each menu item requiring it are provided with the item. While meal service is going on, headcount data and cash collection procedures are also in process. An individual -- patient or staff -- must be authorized to eat in the dining facility. The headcount data collected is forwarded to the Financial Management function at the end of each meal for further processing.

SUBSYSTEM INTERFACES:

The Food Service Subsystem (FSS) depends on other TRIMIS subsystems for the following data and functional support:

- o Patient registration and identification/demographic data (PAD),
- o Patient medical status/history data (Wards and Clinics),
- o Patient administrative status (PAD),
- o Beds occupied census, Army and Air Force only (PAD),
- o Patient drug orders with possible food interactions (Pharmacy),
- o Ordering and inventory maintenance of expendable supplies (Log)

AMENDABILITY TO ADP SUPPORT:

The eventual goal is that FS be an automated system with significant on-line interactive computer support. However, in these flowcharts, the processing is presented only in terms of procedures. Because of this technology-independent approach, the system and the charts are not in any way tied to the use of a computer or any other technology thus enhancing their usefulness.

CONDITION-ACTION
DIAGRAM
INTERPRETATION
GUIDE

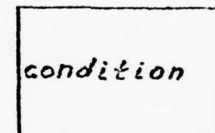
ACTION

When an action circle is encountered, the specified action, procedure, function, or process is to be performed as noted. An action is performed and never has a truth (true or false) value.



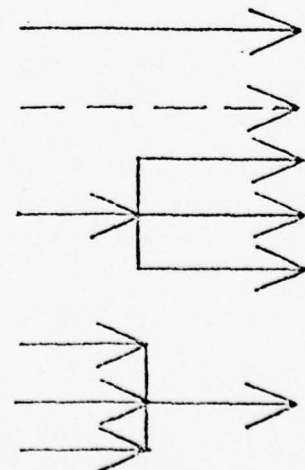
CONDITION

When a condition box is encountered, the specified condition is to be evaluated. If it holds true or succeeds, the following blocks on the diagram are to be executed. If the condition does not hold, then flow along this path of the diagram stops. The flow may, as appropriate, either be permanently blocked or may merely wait at the box pending the successful evaluation of the condition at some later time. A condition always has a truth (true or false) value.



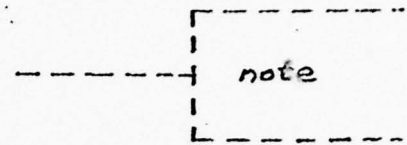
FLOWLINES

Flow proceeds through the diagram along the flowlines. When a flowline splits into multiple lines, all the lines must be followed (perhaps at once). If only one is intended, condition boxes will be used to select the proper line. When flowlines join or reconsolidate into a single line, that line is to be followed regardless of the number of joining lines that were active. Thus there is no waiting at a junction. Control, execution, or interpretation of the diagram is shown by solid flowlines. Data and information, is usually assumed to accompany control, but where necessary for clarity, it is shown, regardless of media, by dashed lines.



NOTE

Clarifying notes, comments, remarks, and other annotation, including references to additional documentation, are enclosed in dashed note boxes and are connected to the annotated structure by dashed lines.



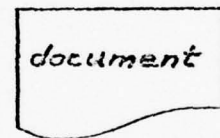
STORAGE

A triangular storage block indicates storage of information or data regardless of the medium of storage. Thus, only dashed data flow lines, not solid control lines, will connect to storage blocks.



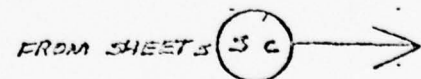
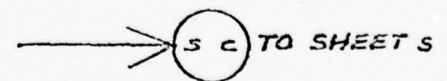
DOCUMENT

A document symbol represents information or data, regardless of media (it may or may not physically reside on a document). It is used only for clarity, as information such as that contained in the "document" is assumed to always be present along with the control flow. Like the storage symbol, only dashed data lines may connect to a document symbol.



CONNECTOR

A connector circle specifies that the flow continues on another page. An out-connector contains a number, which is the sheet number at which the flow is continued, and a letter, which specifies which in-connector on that sheet is being referenced. The in-connector contains the matching number-letter code. Adjacent to the connectors is a notation as to the sheet and process to or from which the connectors refer.



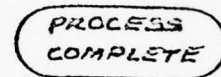
PROCESS

A striped process circle indicates a process to be performed. It is analagous to a high-level or meta-action. The process referenced will be diagrammed in its own set of condition-action flowcharts which are included in the same packet of flowcharts for reference. After the process is performed, flow resumes.



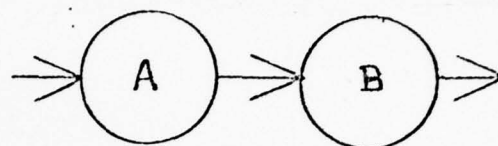
TERMINATOR

The oblong terminator symbol indicates that the current process or sub-process is complete. Normally, upon completion of a process, control returns to the process which invoked it, and resumes where it left off in that process.

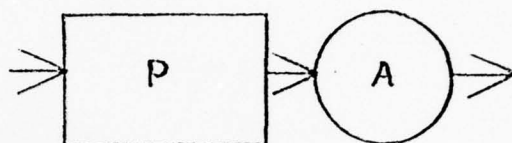


CONDITION-ACTION EXAMPLES

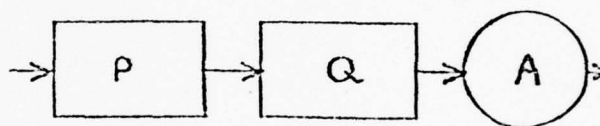
Perform Action A first, then in sequence, perform B.



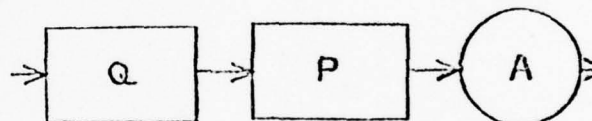
If condition P holds true, then perform Action A. If P does not hold, do not perform A.



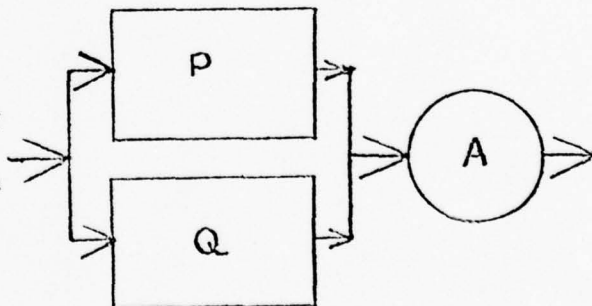
If both condition P and condition Q hold true, then perform A. If either one does not hold, then do not perform A.



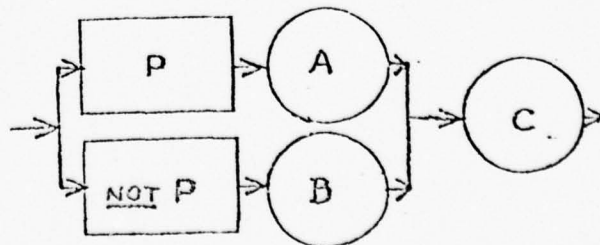
Same function and same net results as above, but evaluated in a different sequence.



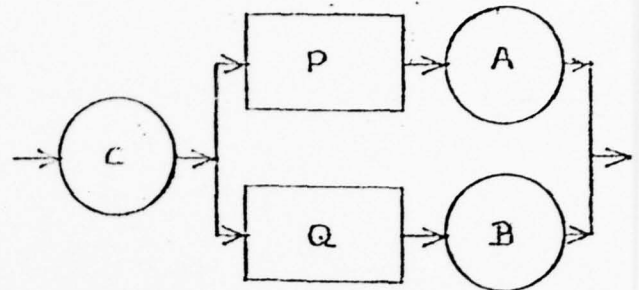
If either condition P holds true, or if condition Q holds true (or both), then perform A. If neither holds true, then do not perform A.



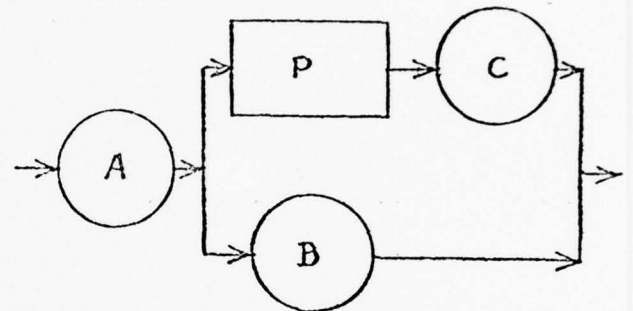
If condition P holds true, then perform Action A but not B. If P does not hold, then perform B but not A. In any case, when done, perform C.



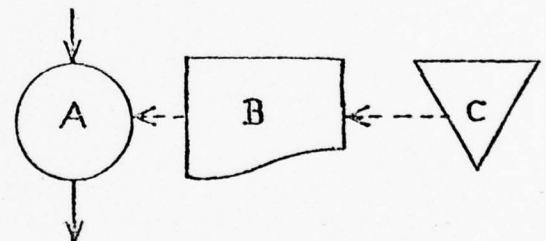
First perform Action C. Then: If condition P holds true, then perform Action A. If condition Q holds true, then perform action B. Note that both P and Q may hold, in which case both A and B will be performed.



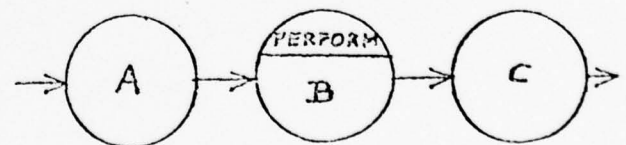
First perform Action A, then (in all cases) perform Action B. Additionally, if condition P holds true, then perform Action C (perhaps at the same time as Action B).



Perform Action A utilizing information contained on the document B which was retrieved from the file C.



First perform Action A. Then perform process B, which is itself flowcharted elsewhere in this set of charts. After B is completed, return to here and perform Action C.



OVERVIEW CHART:

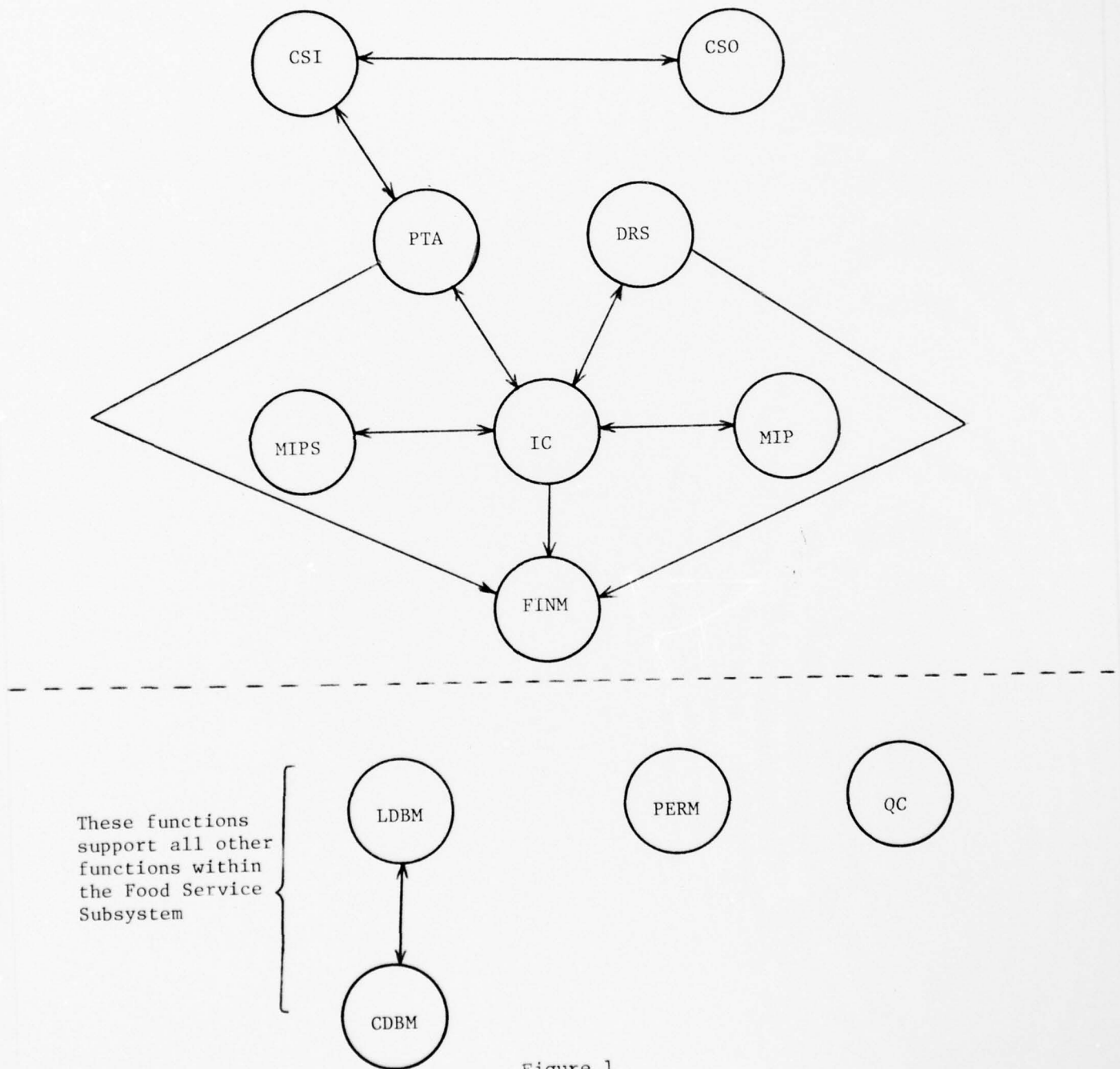
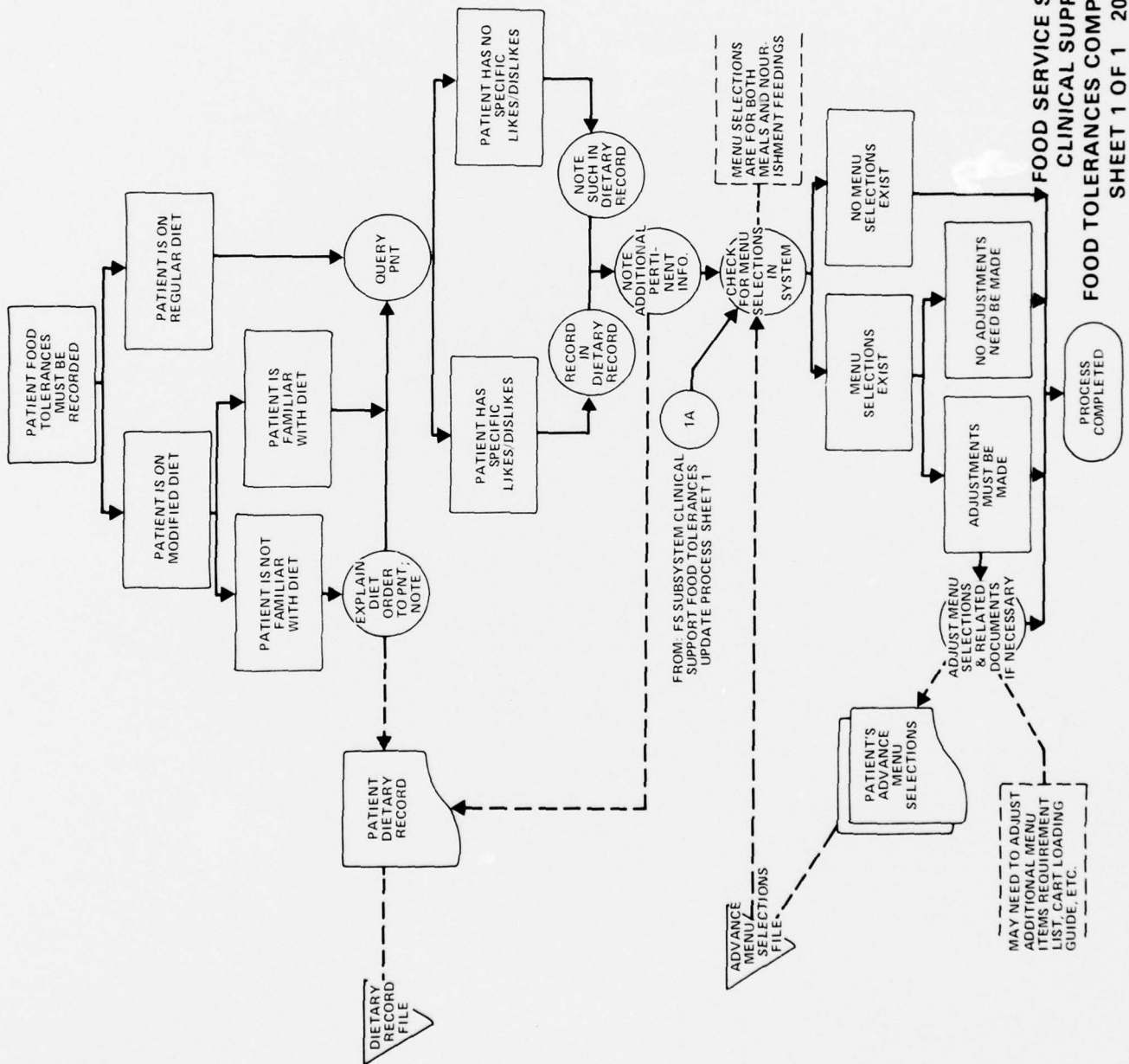
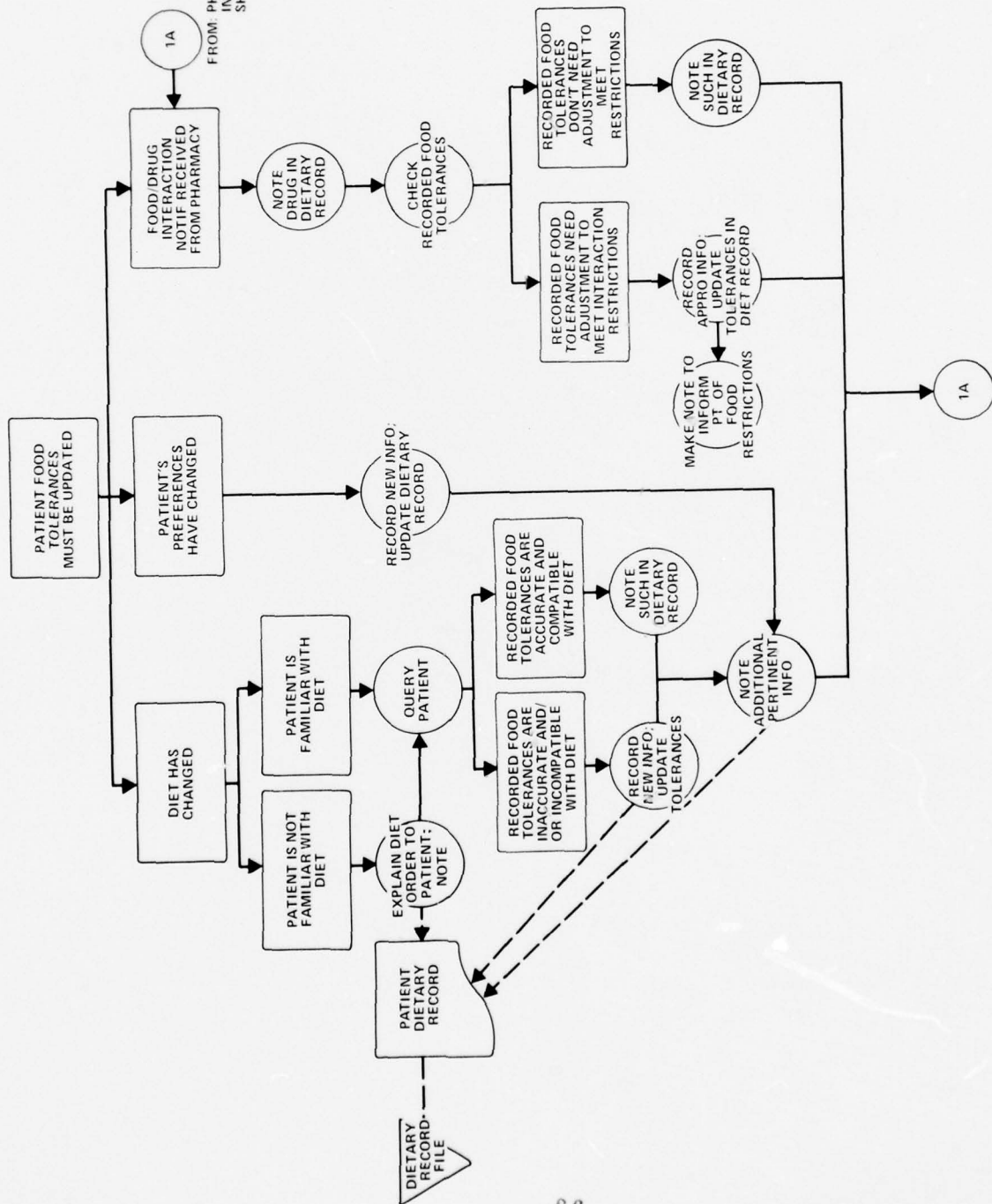
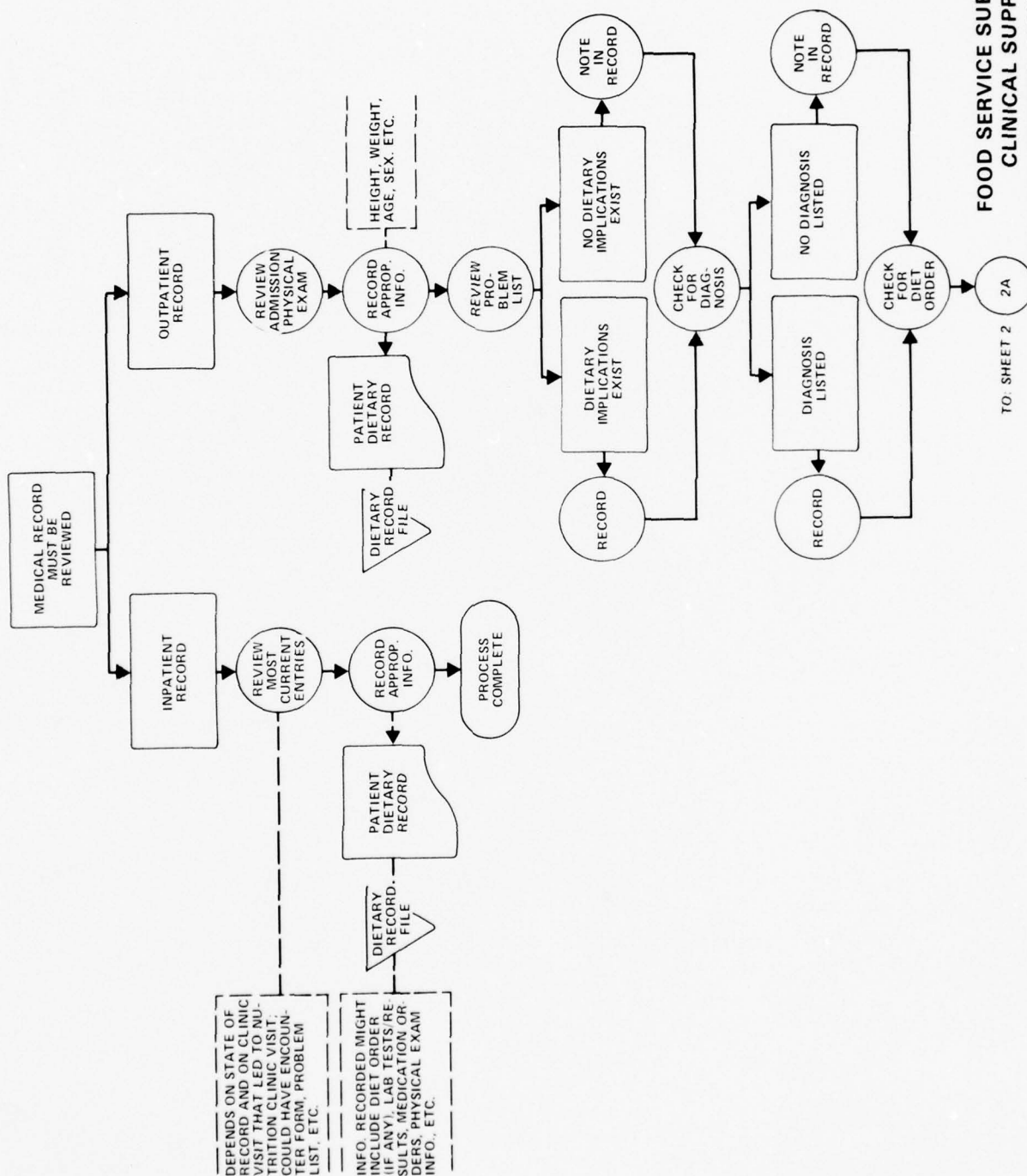


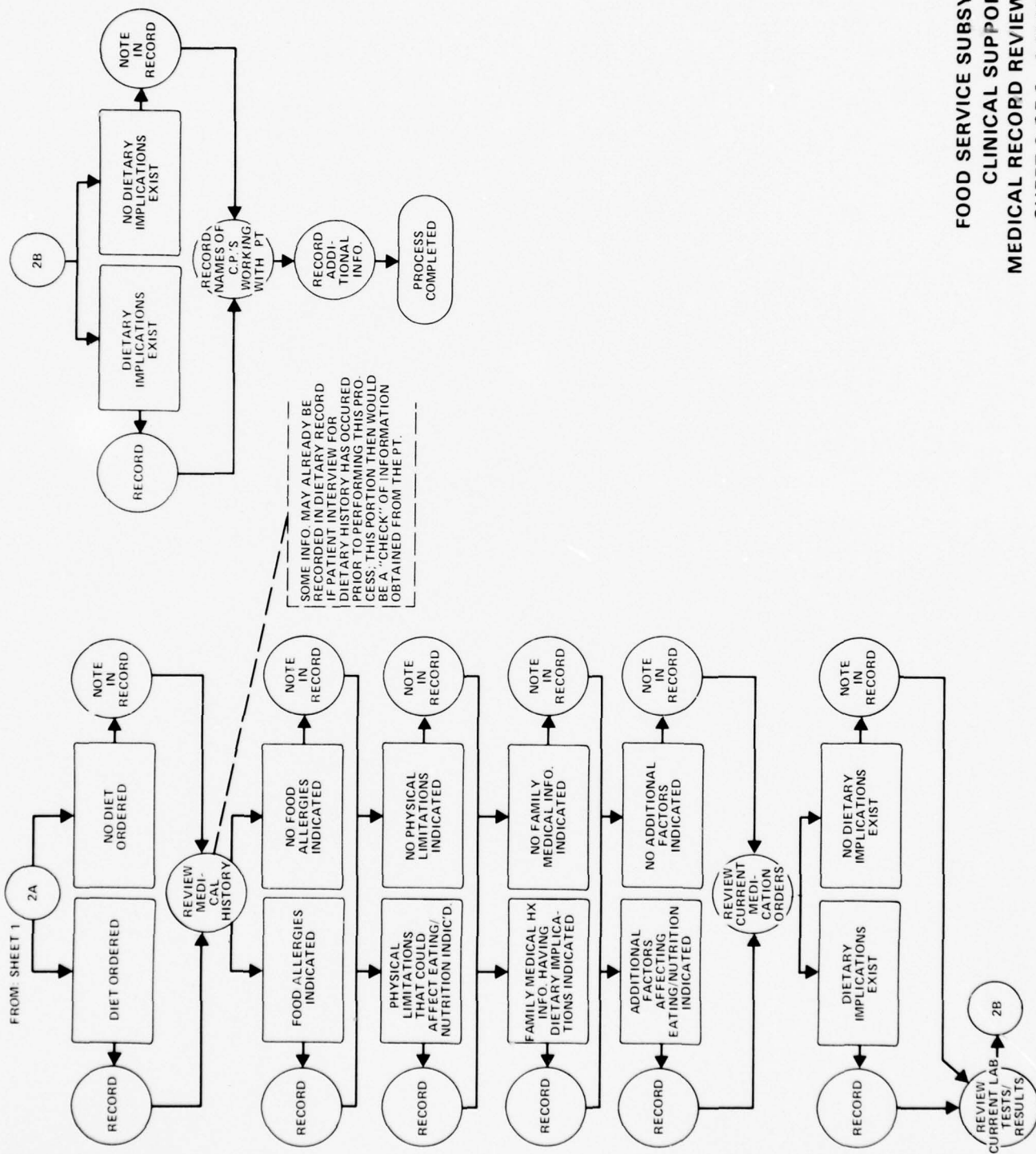
Figure 1

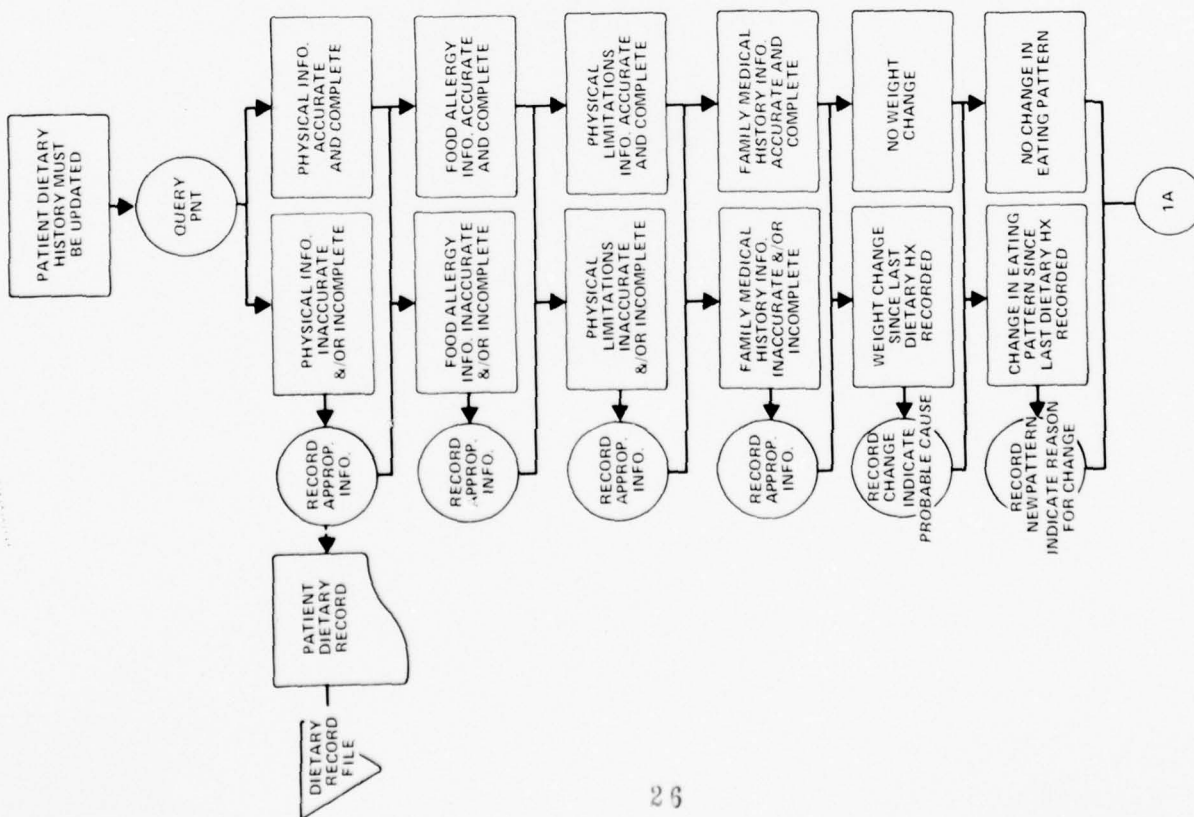
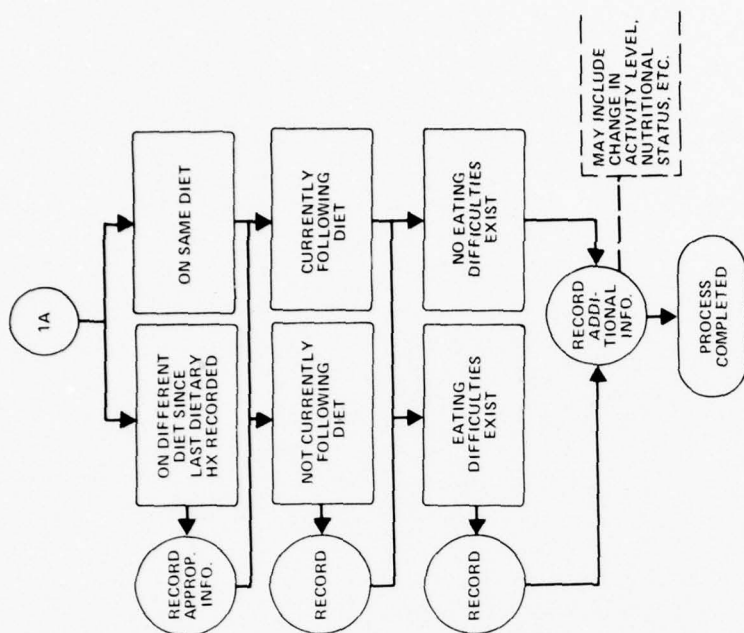




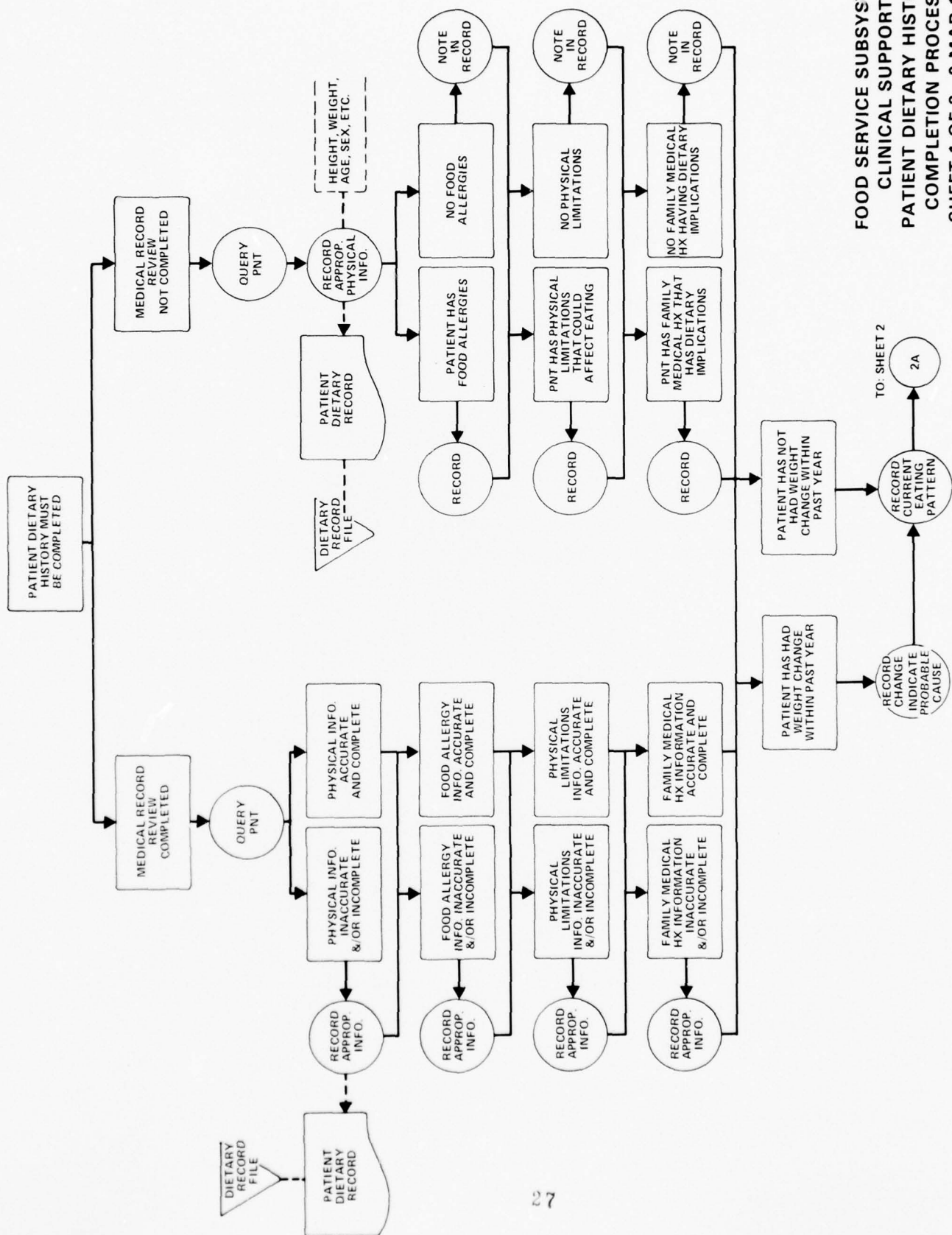


FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT
MEDICAL RECORD REVIEW PROCESS
SHEET 1 OF 2 9 MAR 1975

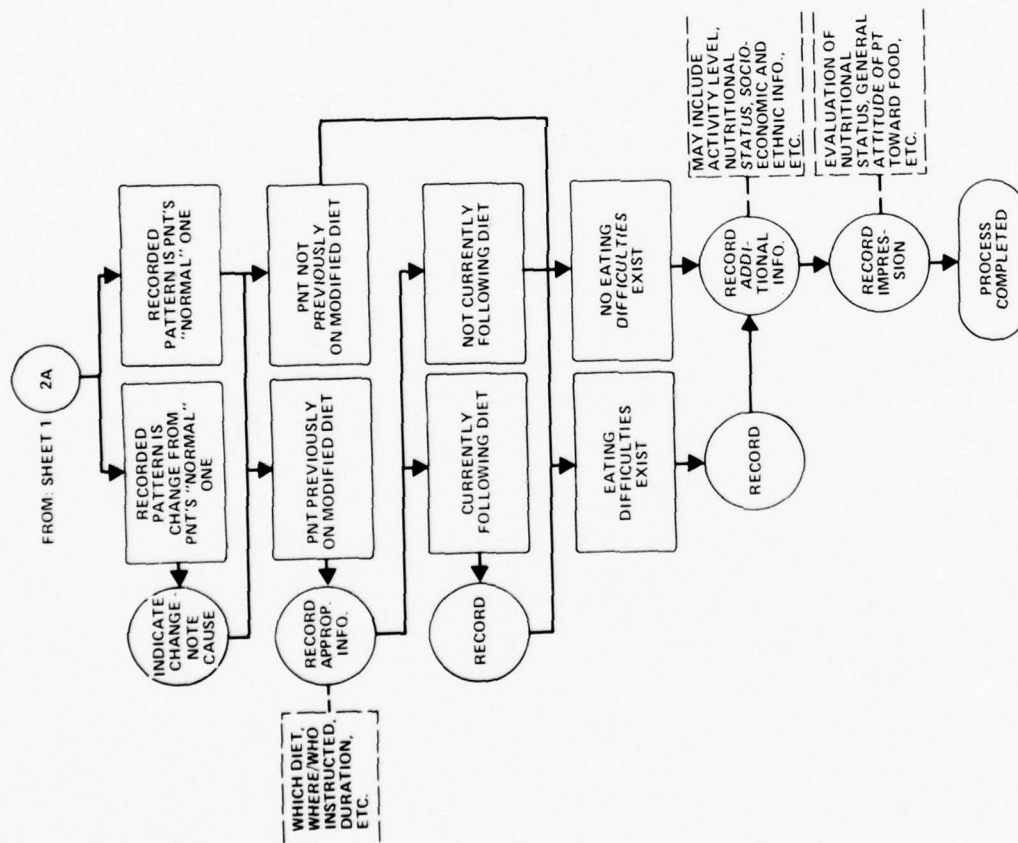




FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT
PATIENT DIETARY HISTORY UPDATE PROCESS
SHEET 1 OF 1 9 MAR 1975

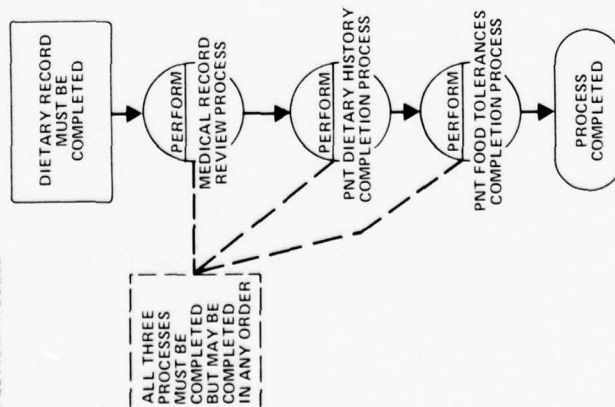


FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT
PATIENT DIETARY HISTORY
COMPLETION PROCESS
SHEET 1 OF 2 9 MAR 1975

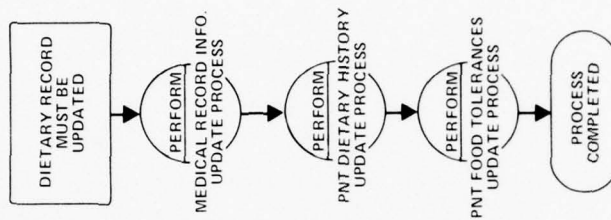


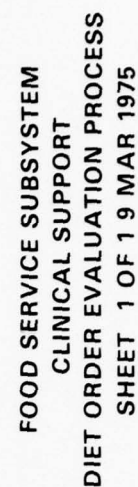
FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT
PATIENT DIETARY HISTORY COMPLETION PROCESS
SHEET 2 OF 2 9 MAR 1975

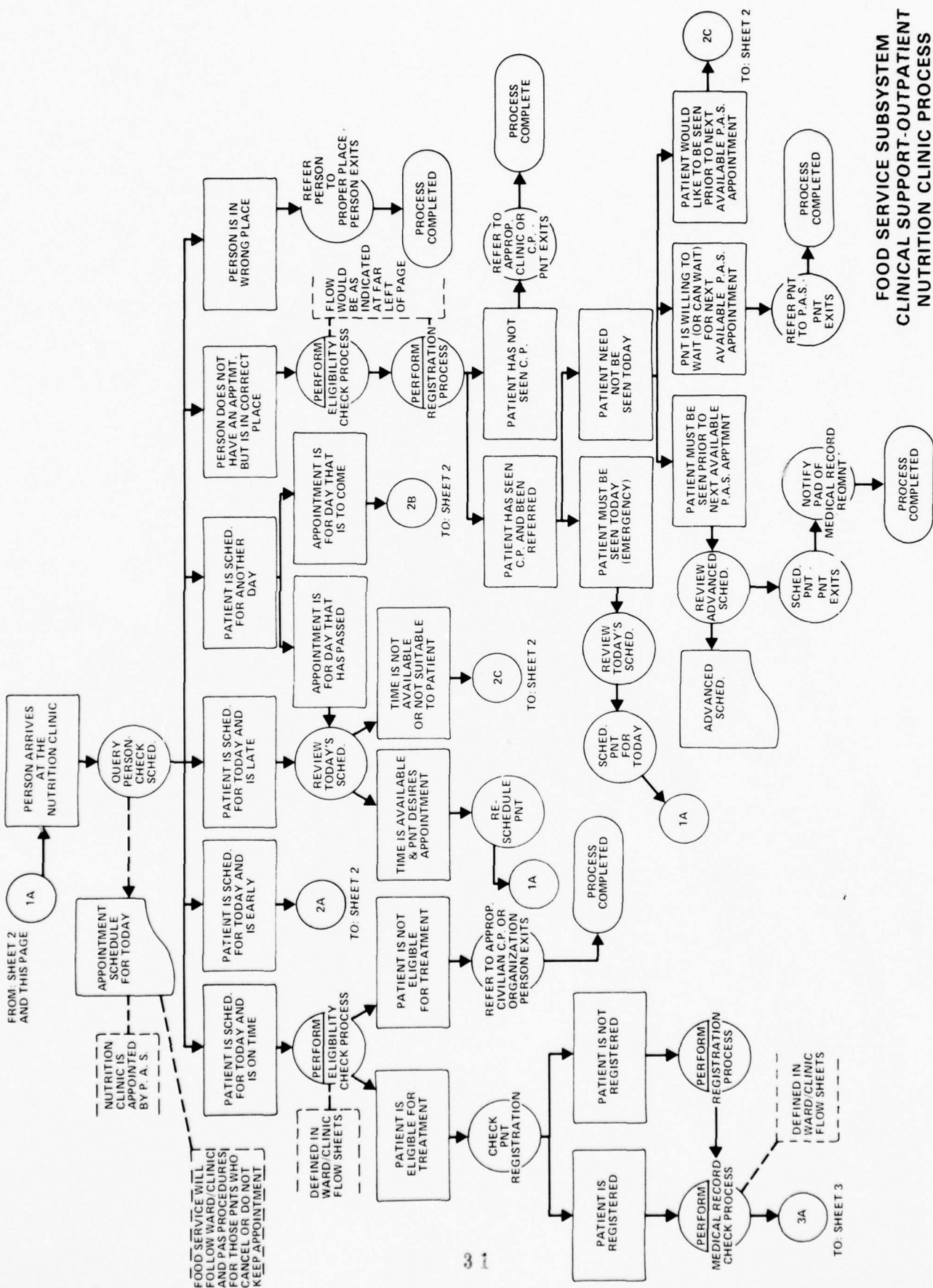
DIETARY RECORD
COMPLETION PROCESS

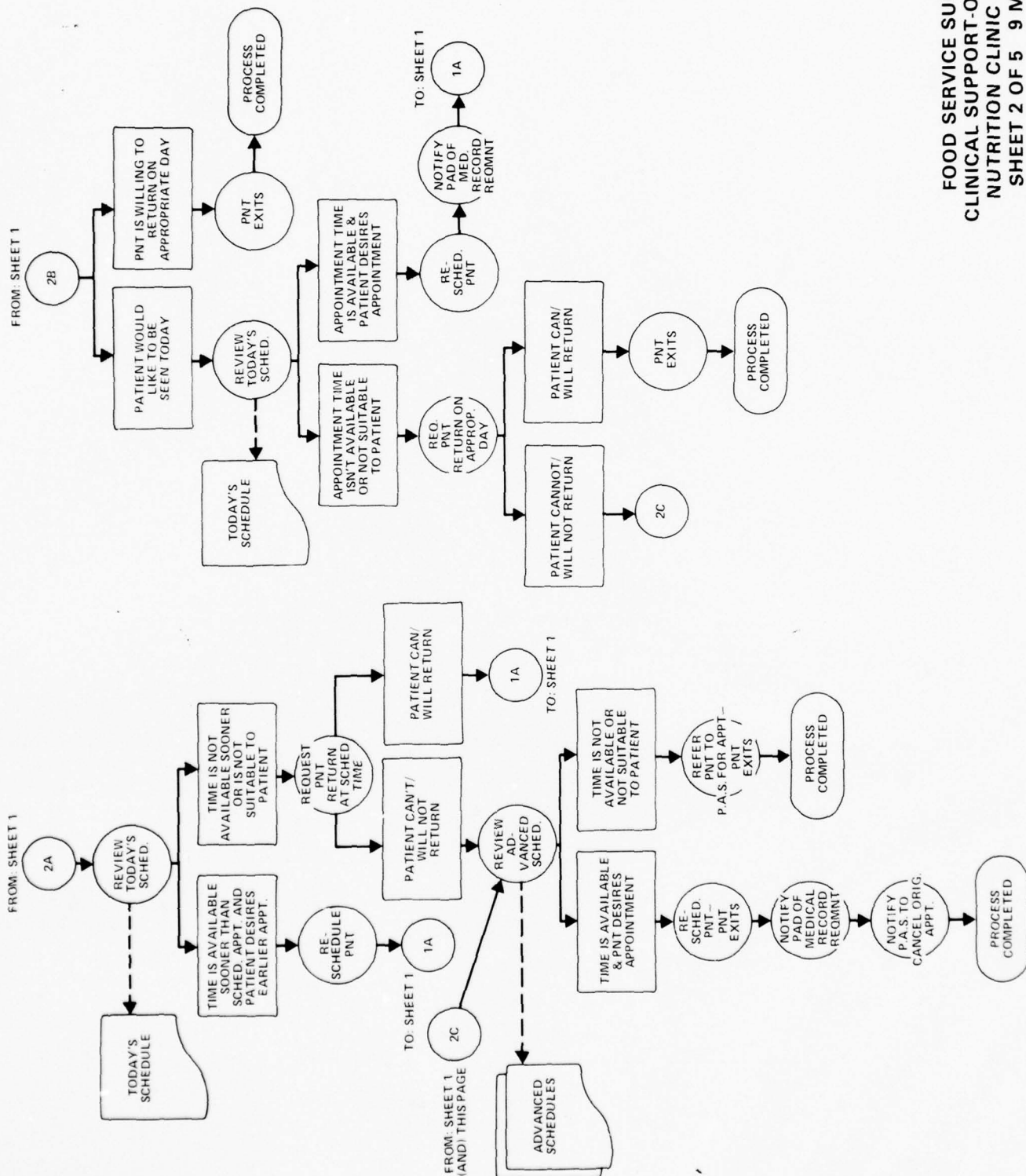


DIETARY RECORD
UPDATE PROCESS

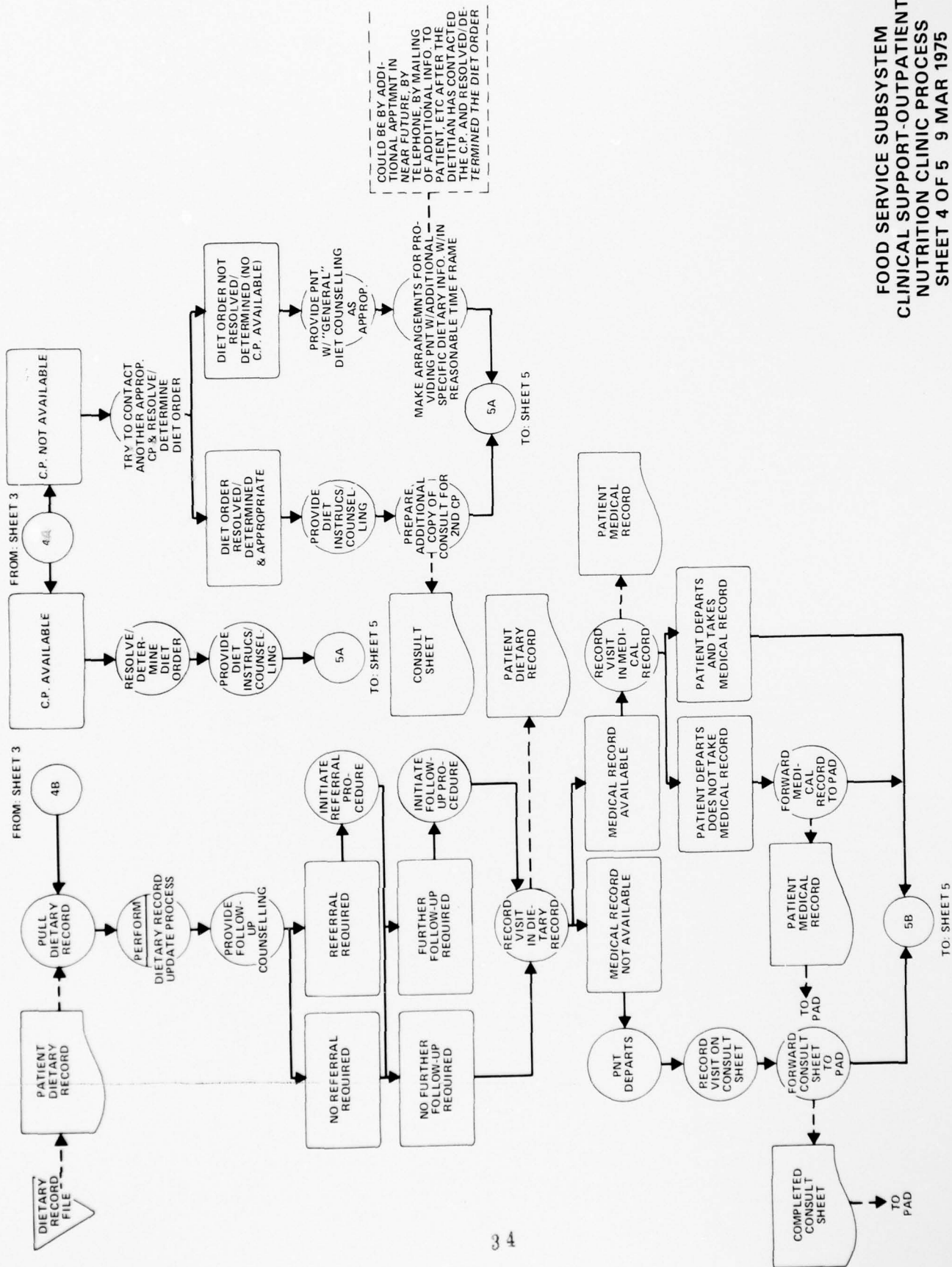


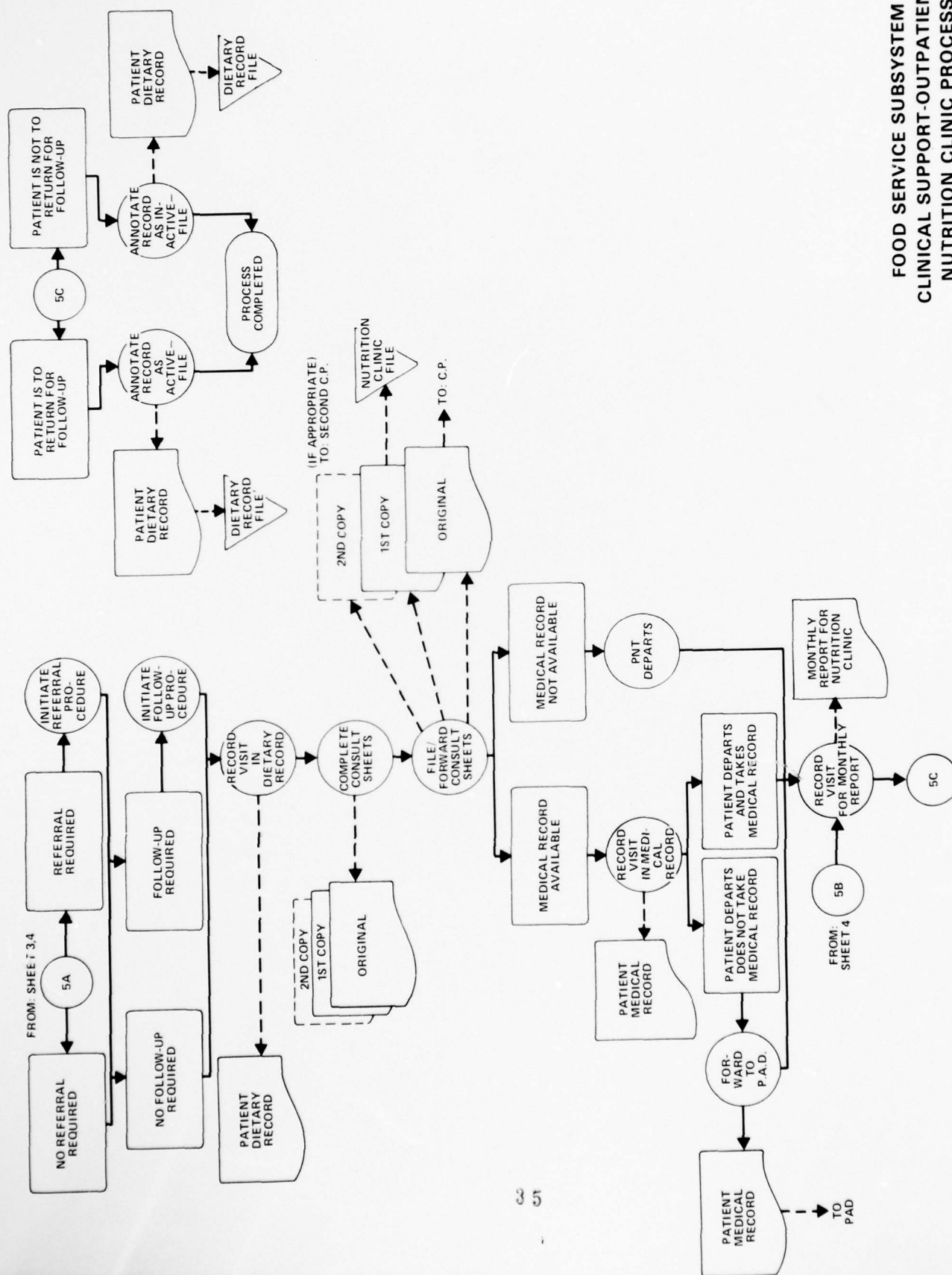


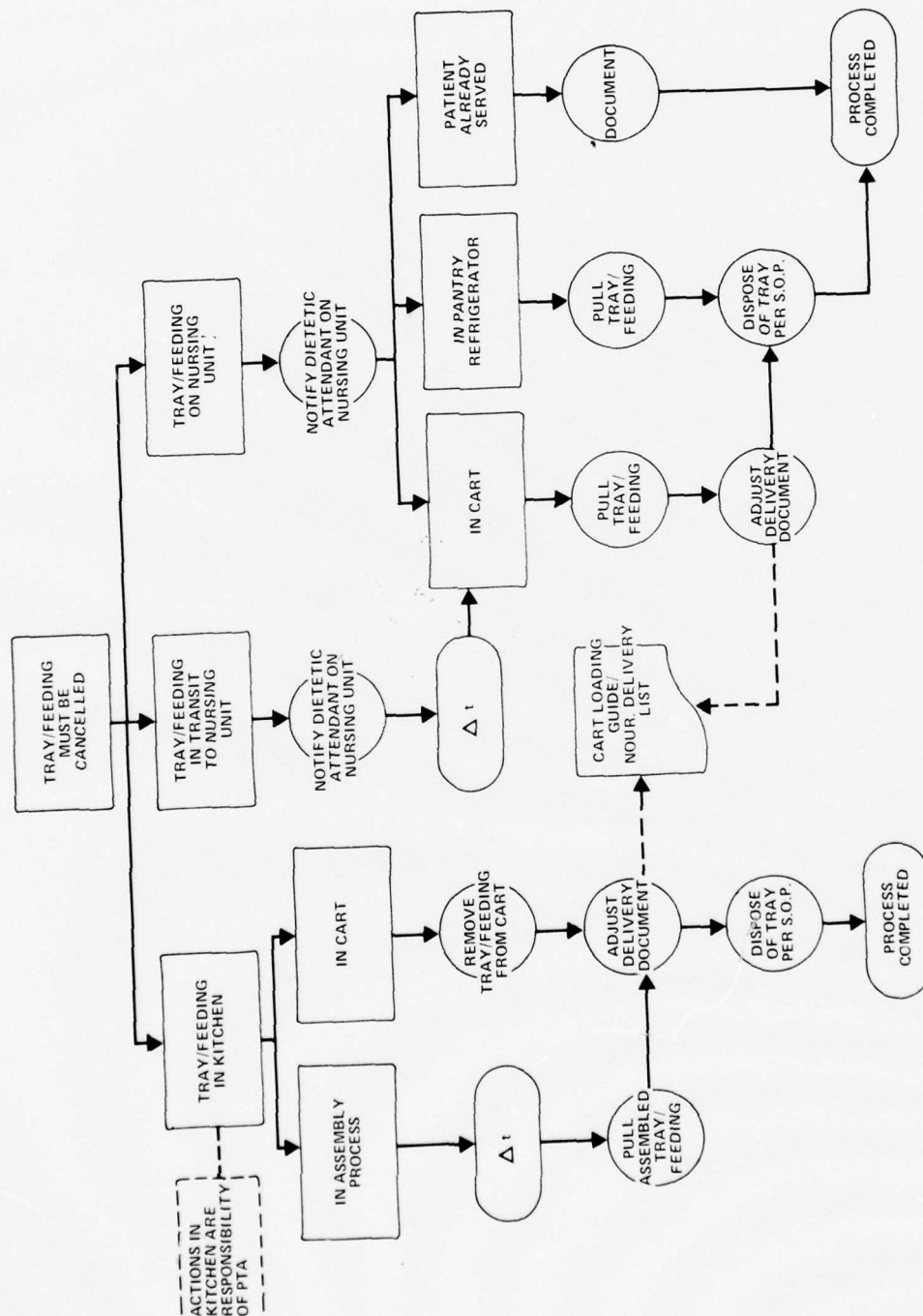




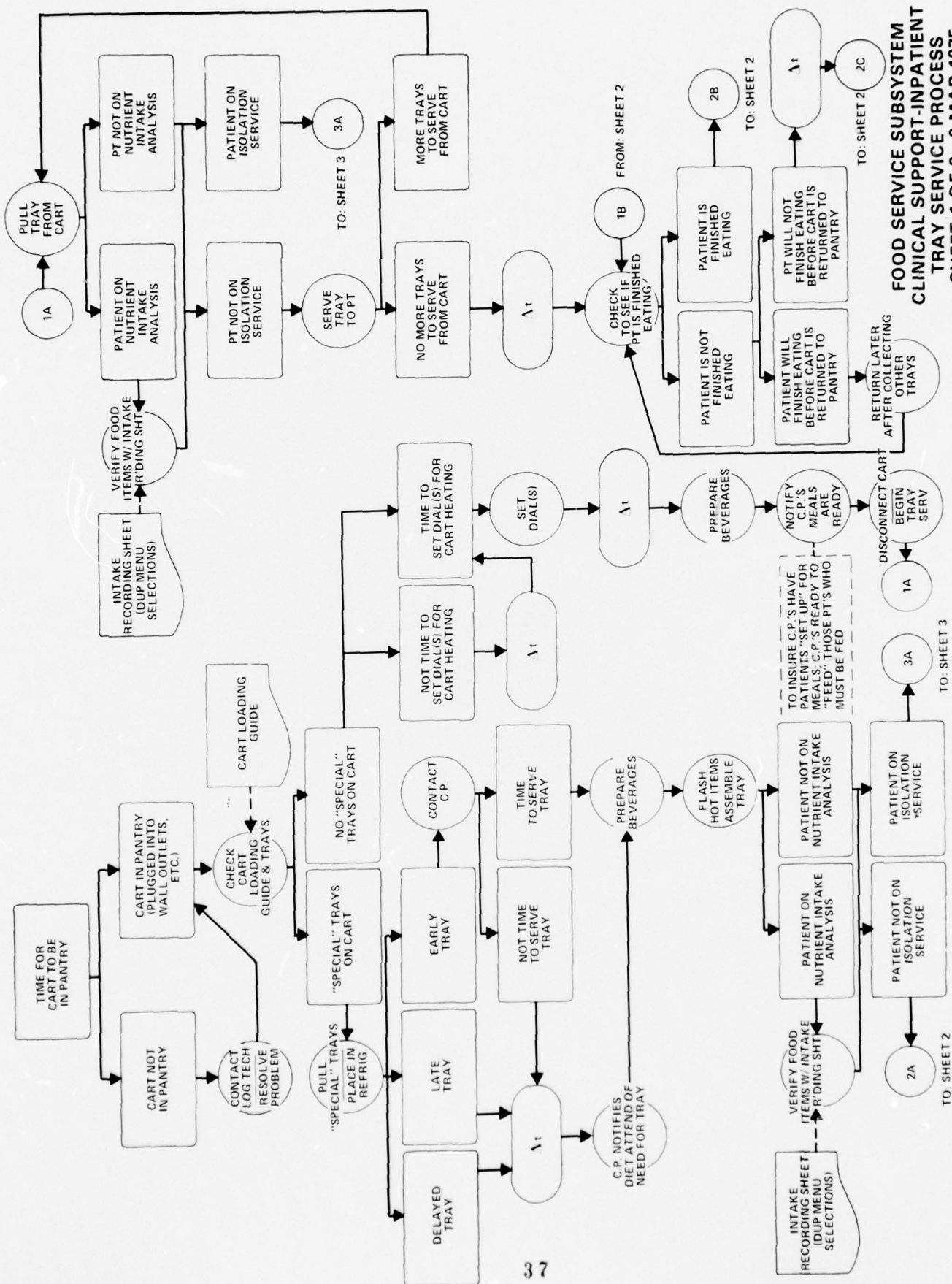
FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-OUTPATIENT
NUTRITION CLINIC PROCESS
SHEET 2 OF 5 9 MAR 1975



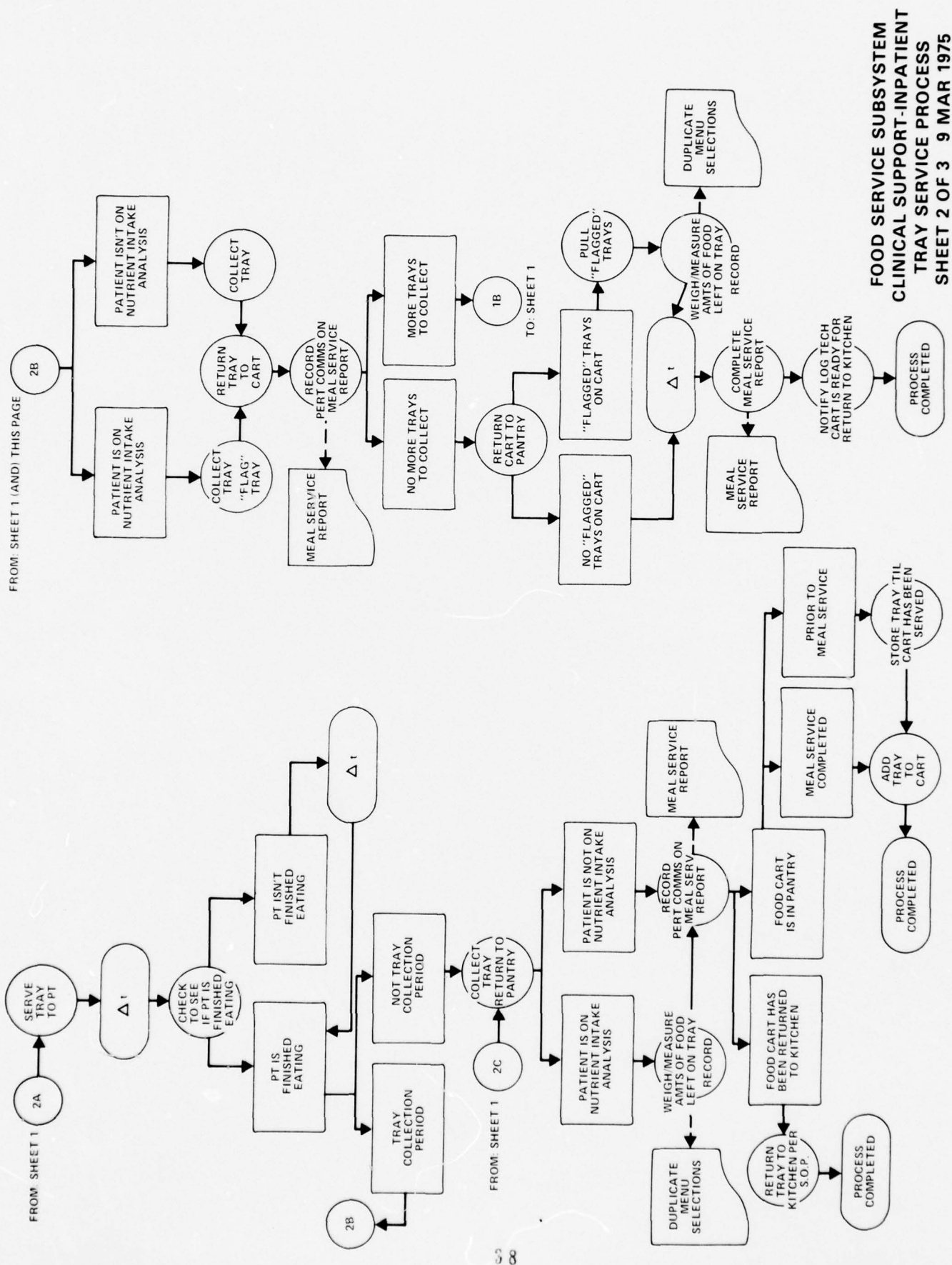


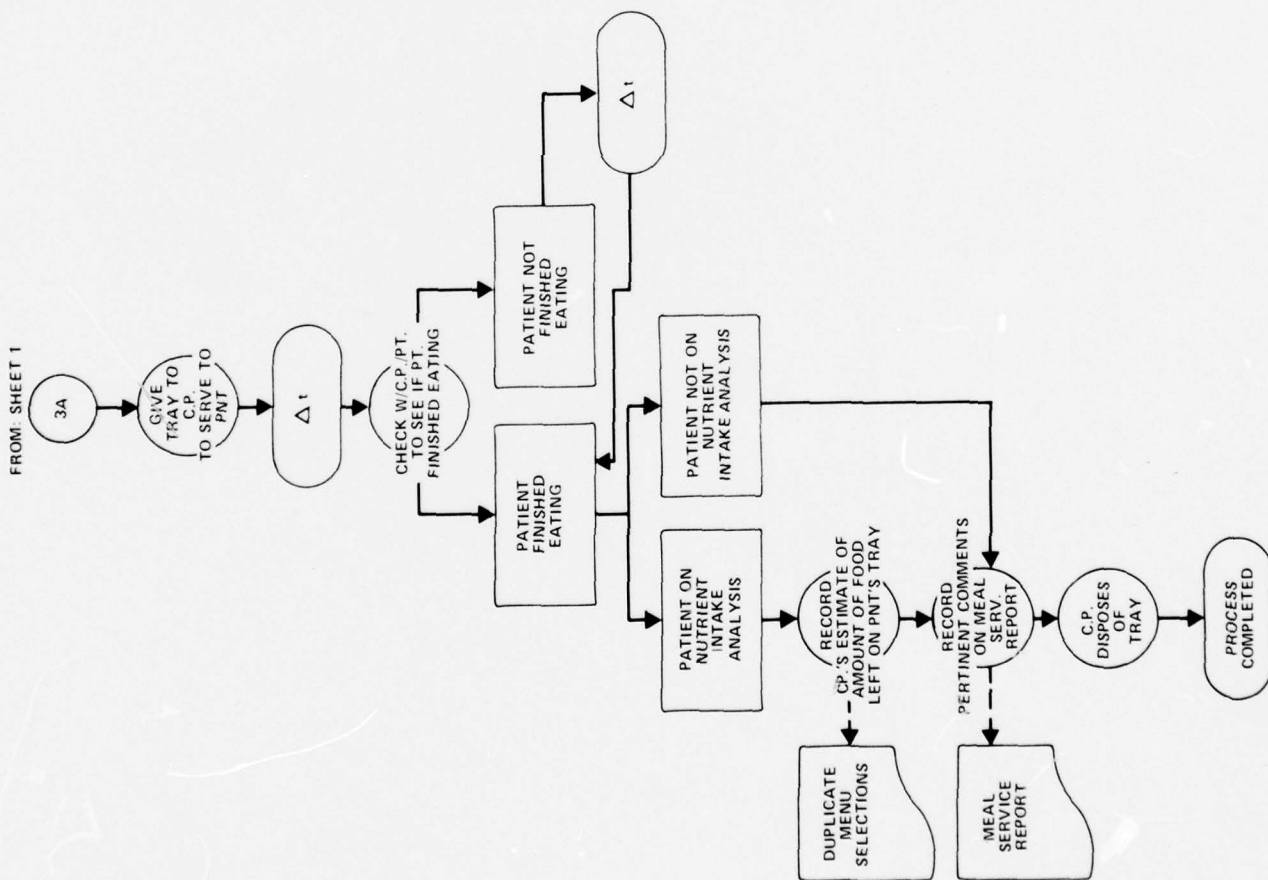


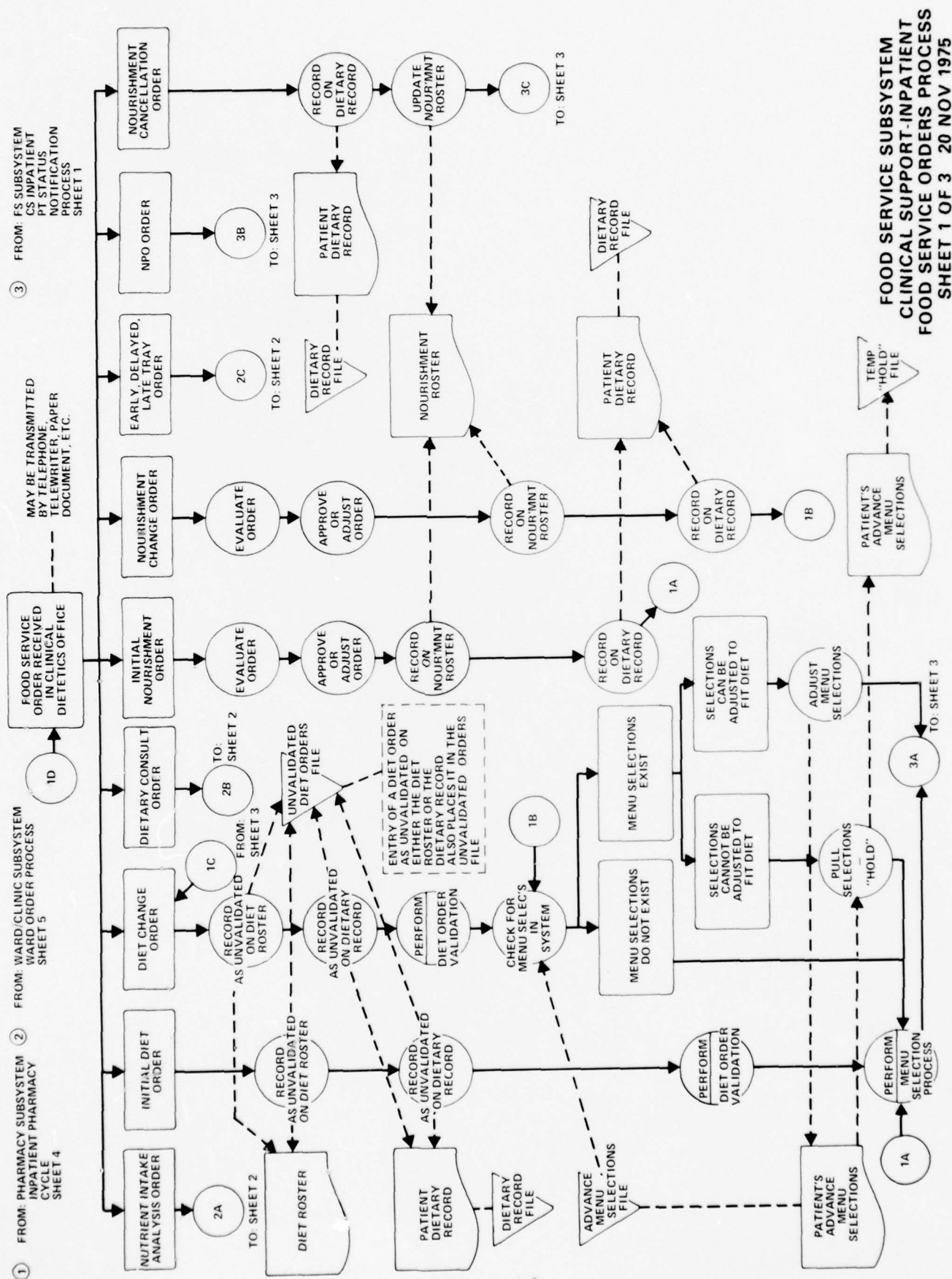
FOOD SERVICE SUBSYSTEM
 CLINICAL SUPPORT-INPATIENT
 TRAY/FEEDING CANCELLATION PROCESS
 SHEET 1 OF 1 9 MAR 1975

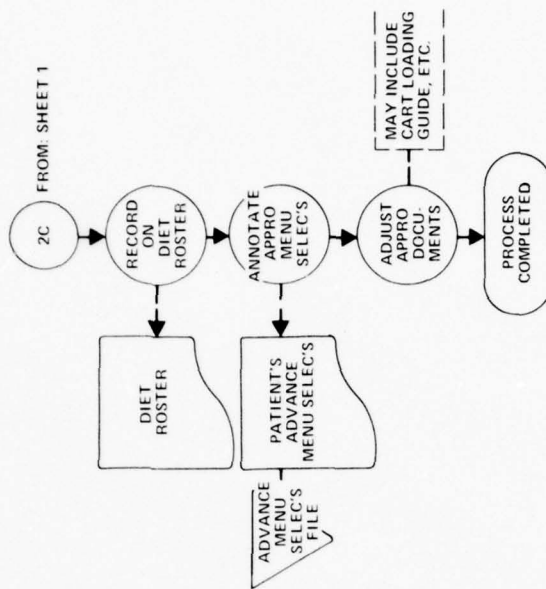
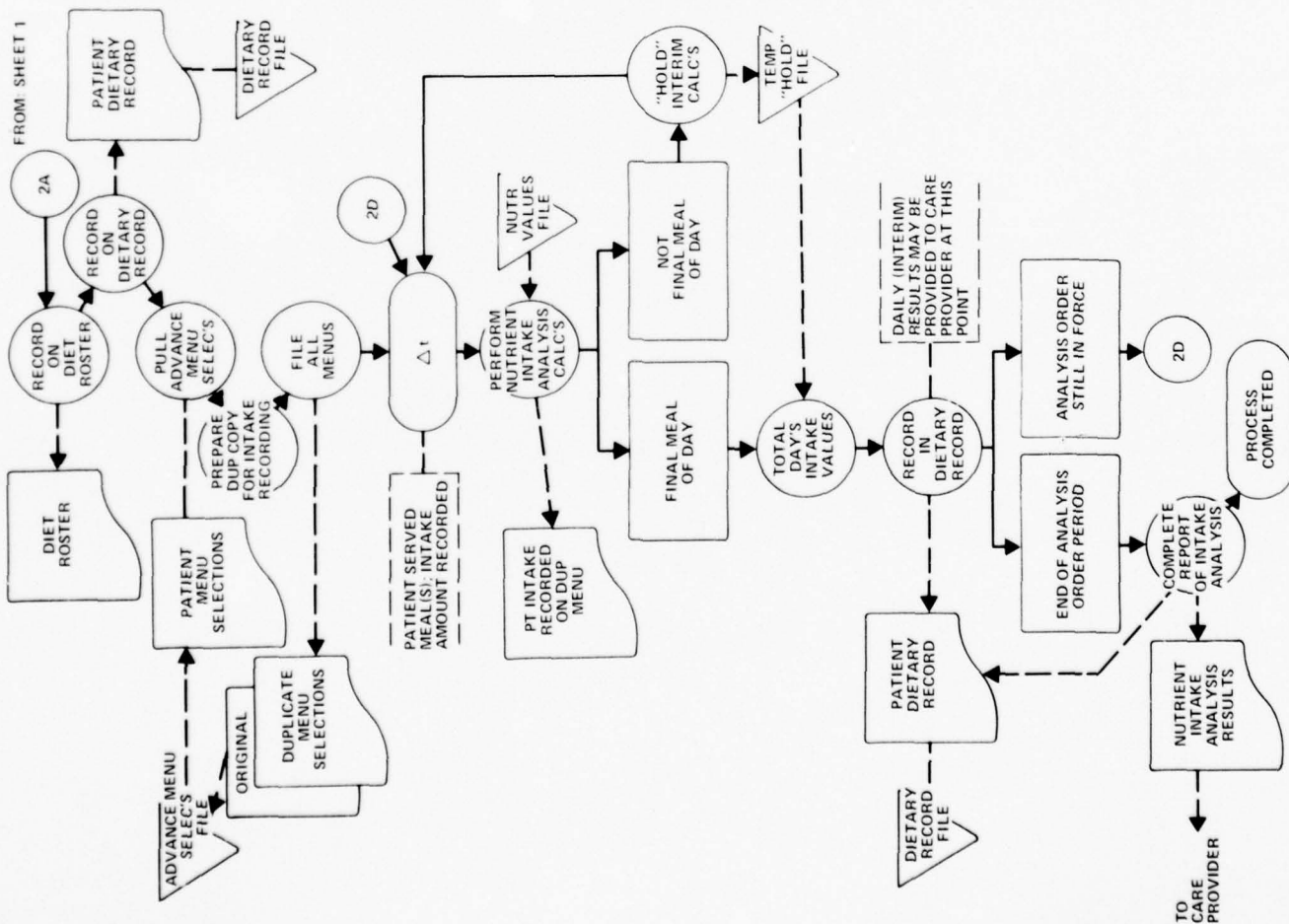


FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-INPATIENT
TRAY SERVICE PROCESS
SHEET 1 OF 3 9 MAR 1975



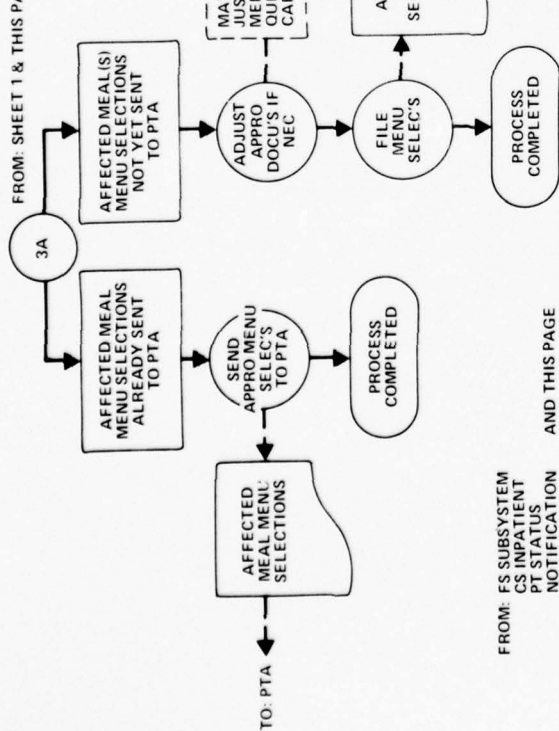






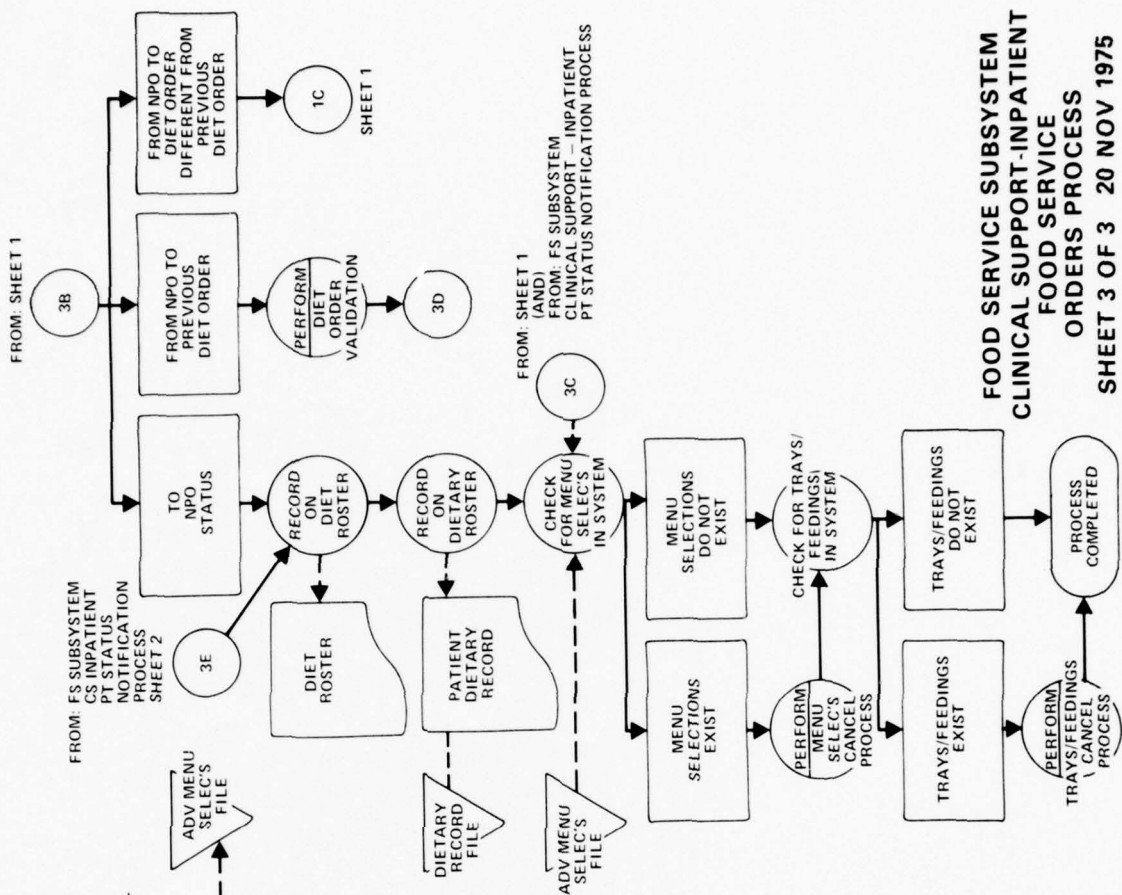
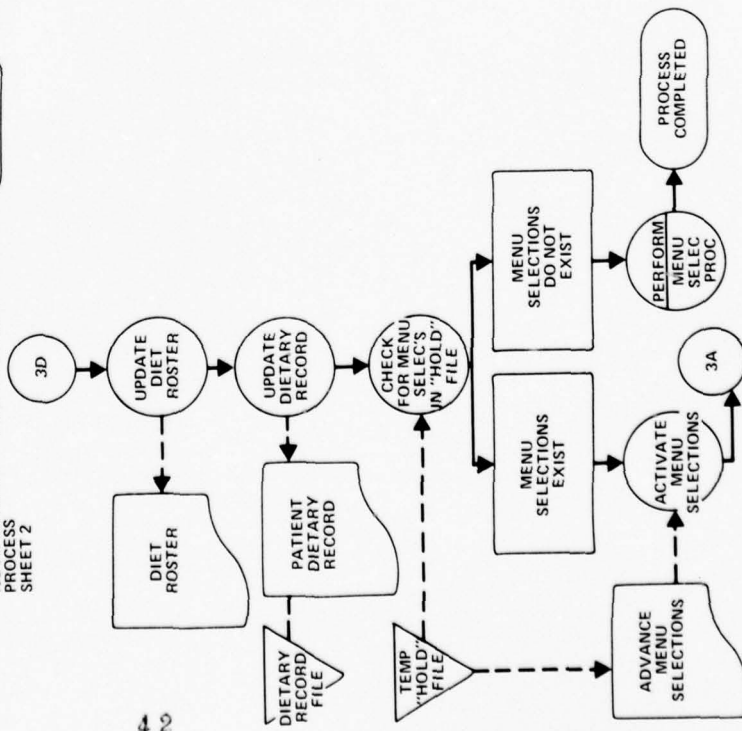
FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-INPATIENT
FOOD SERVICE ORDERS PROCESS
SHEET 2 OF 3 20 NOV 1975

FROM: SHEET 1 & THIS PAGE

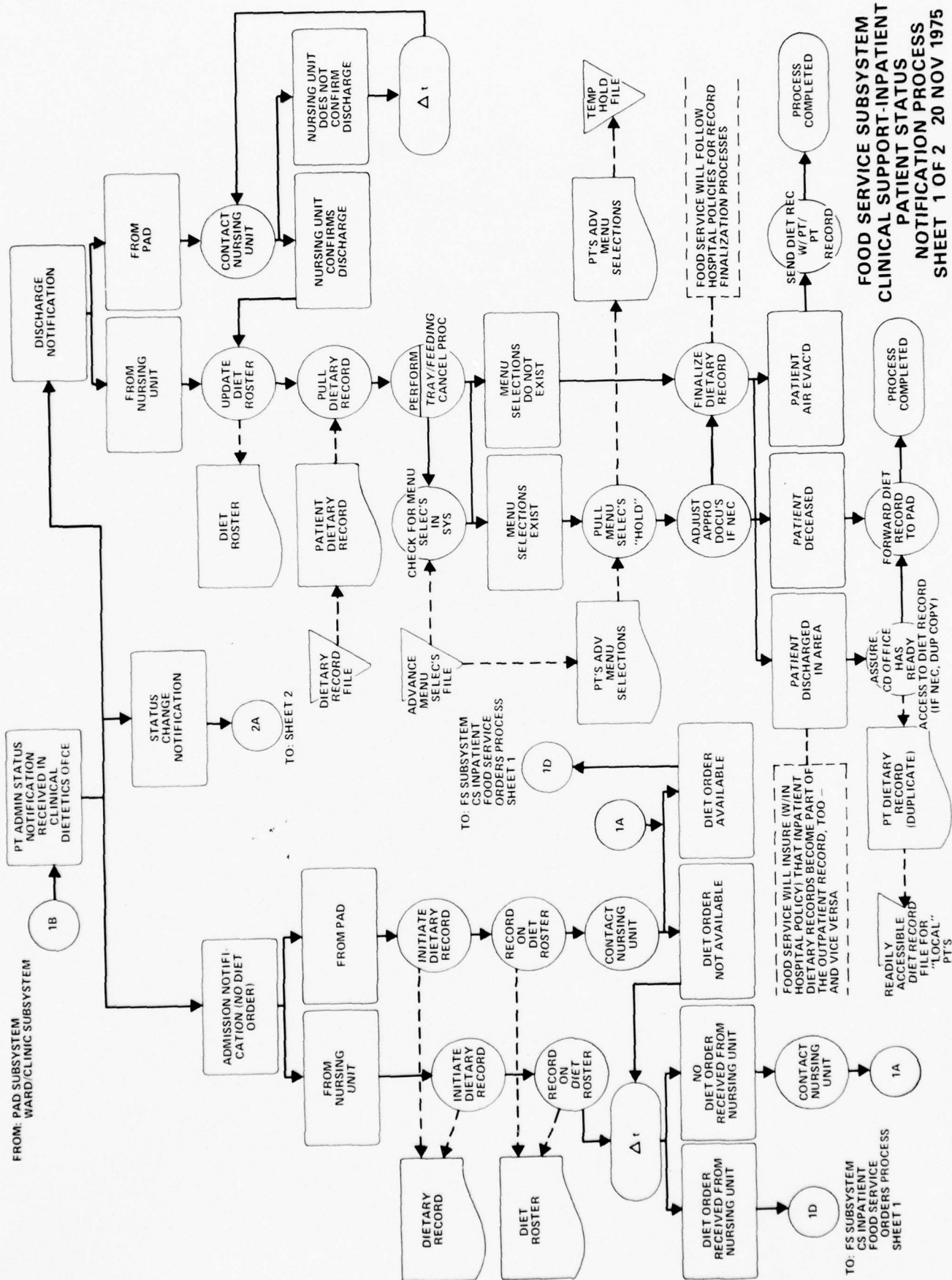


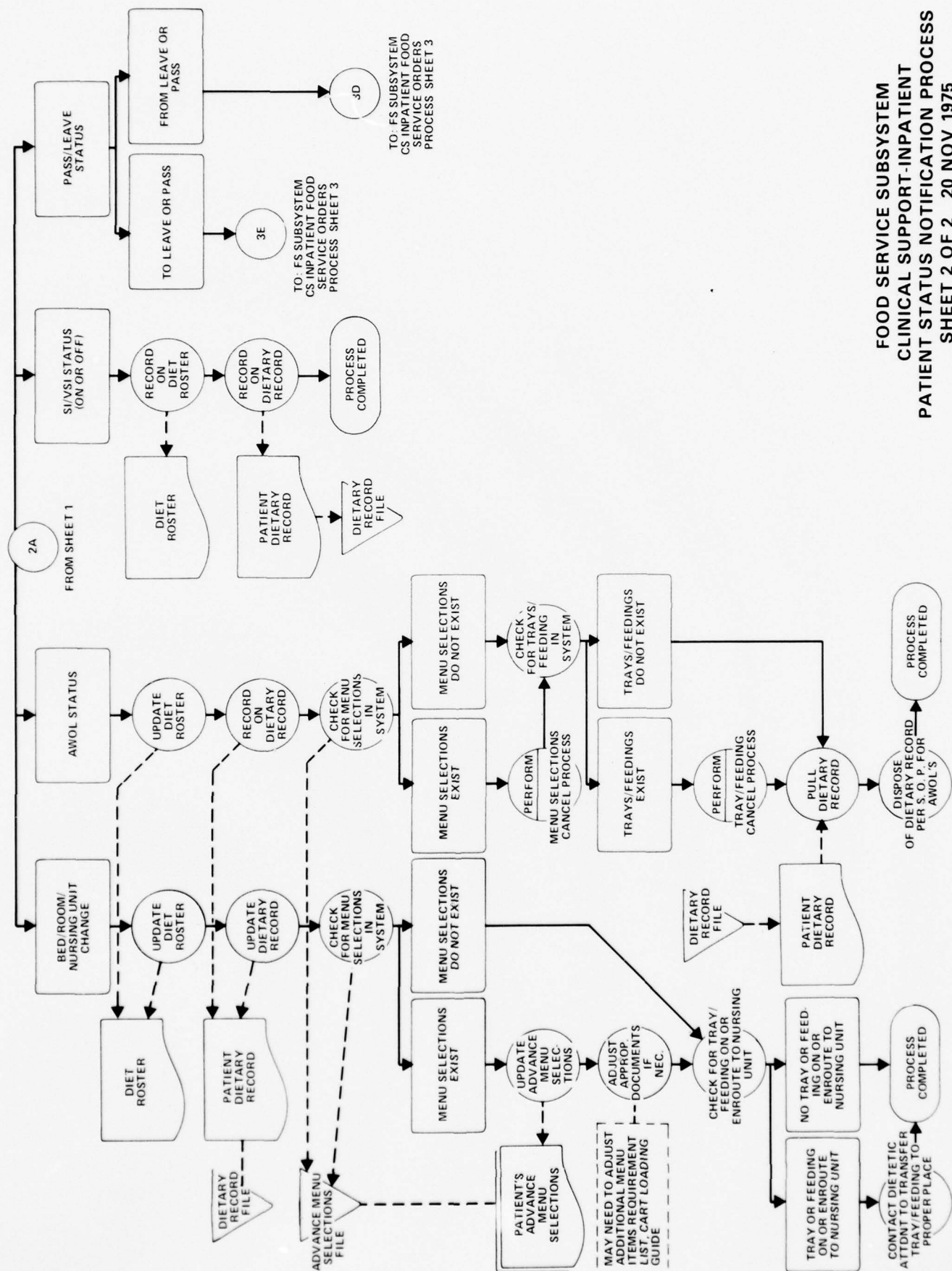
FROM: FS SUBSYSTEM CS INPATIENT PT STATUS NOTIFICATION PROCESS SHEET 2

AND THIS PAGE

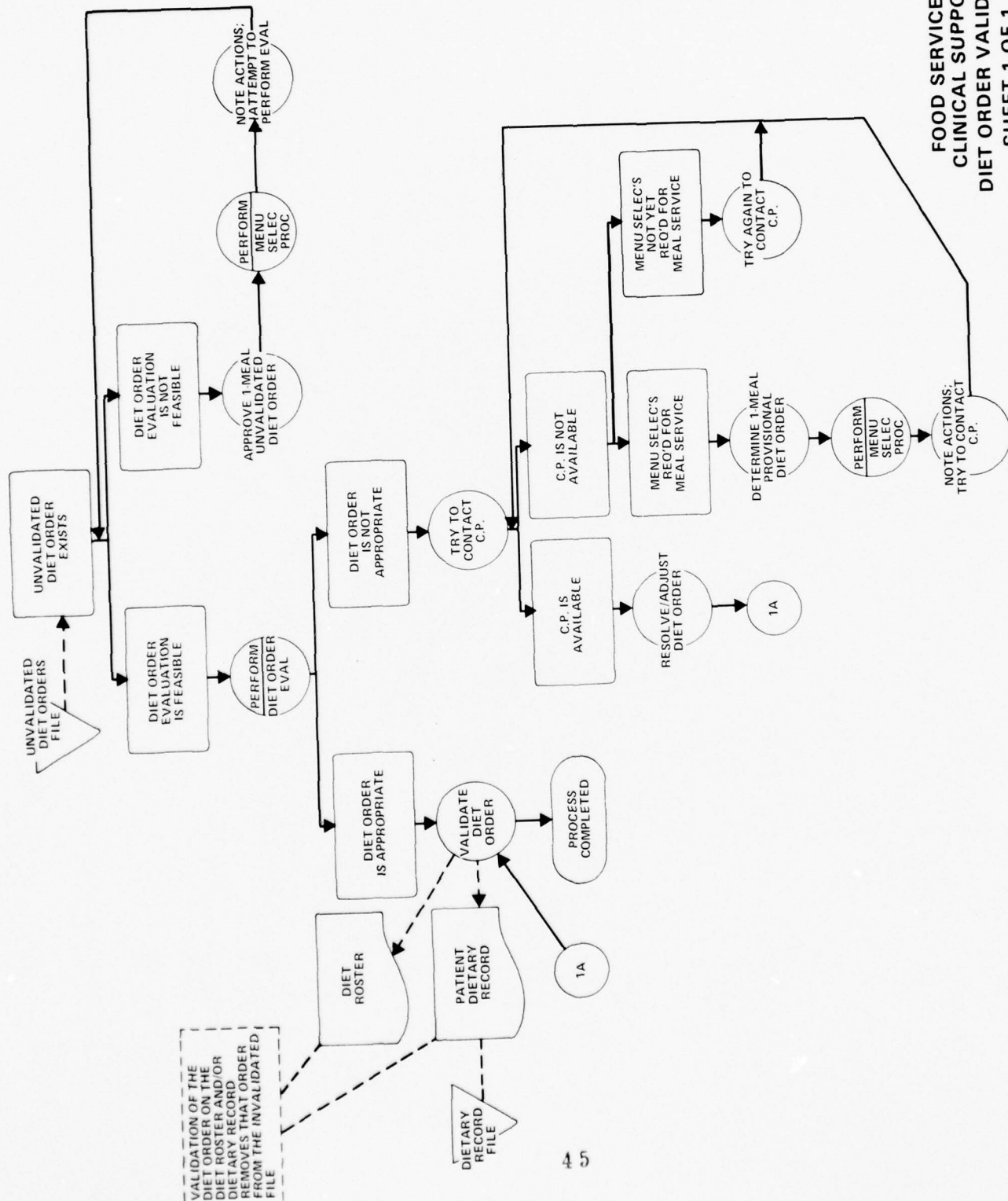


FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-INPATIENT
FOOD SERVICE
ORDERS PROCESS
SHEET 3 OF 3 20 NOV 1975

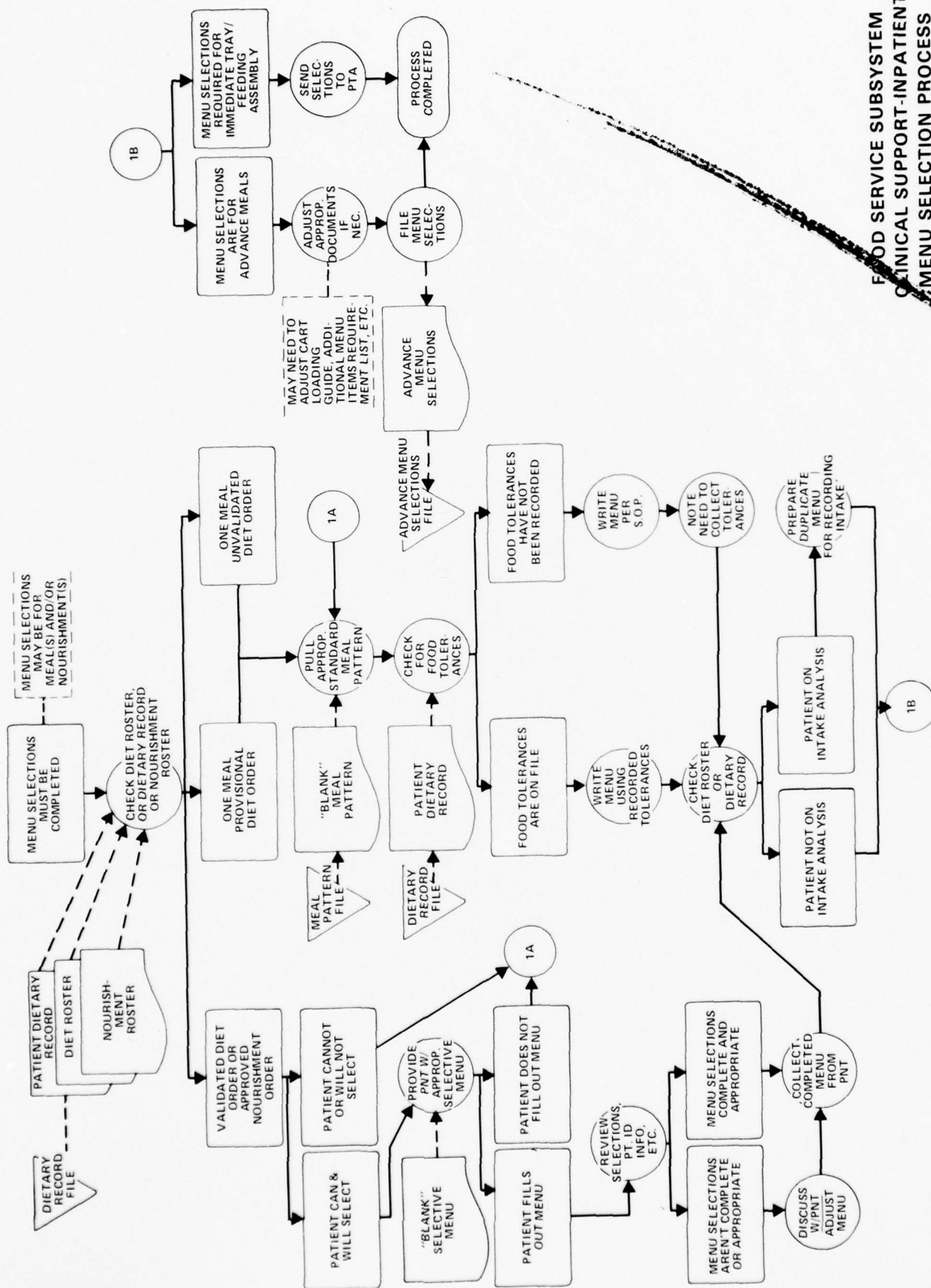


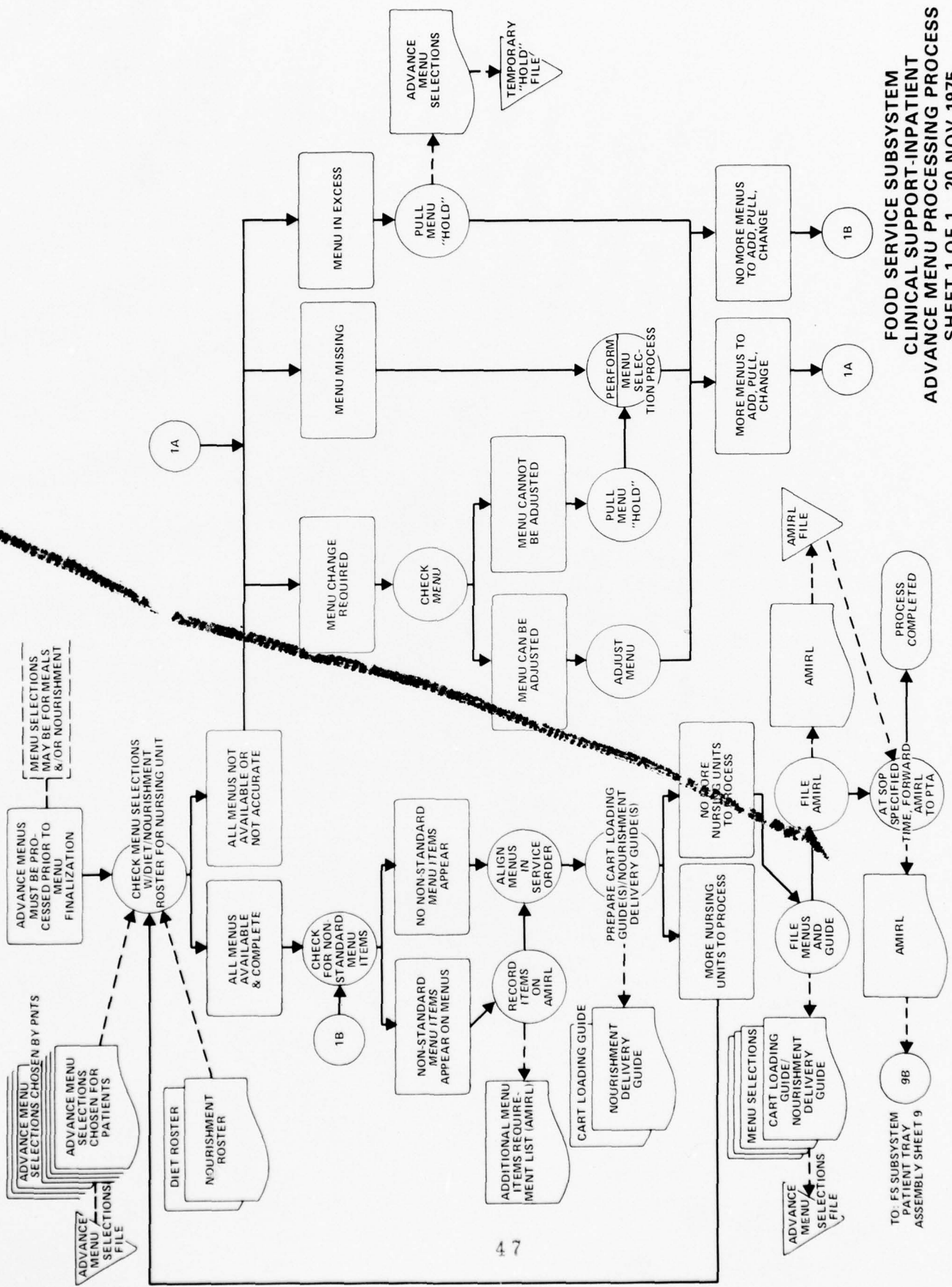


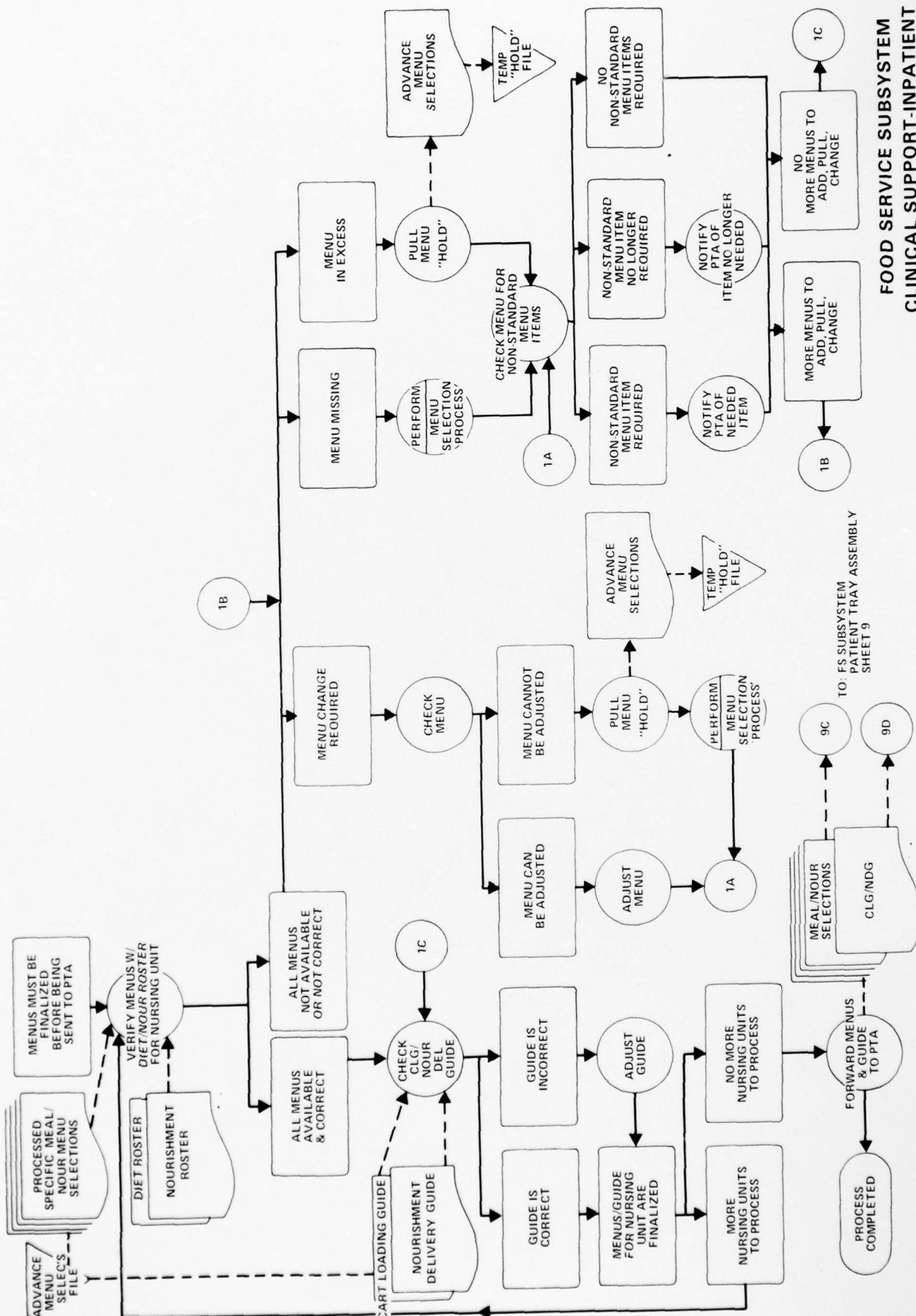
FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-INPATIENT
PATIENT STATUS NOTIFICATION PROCESS
SHEET 2 OF 2 20 NOV 1975



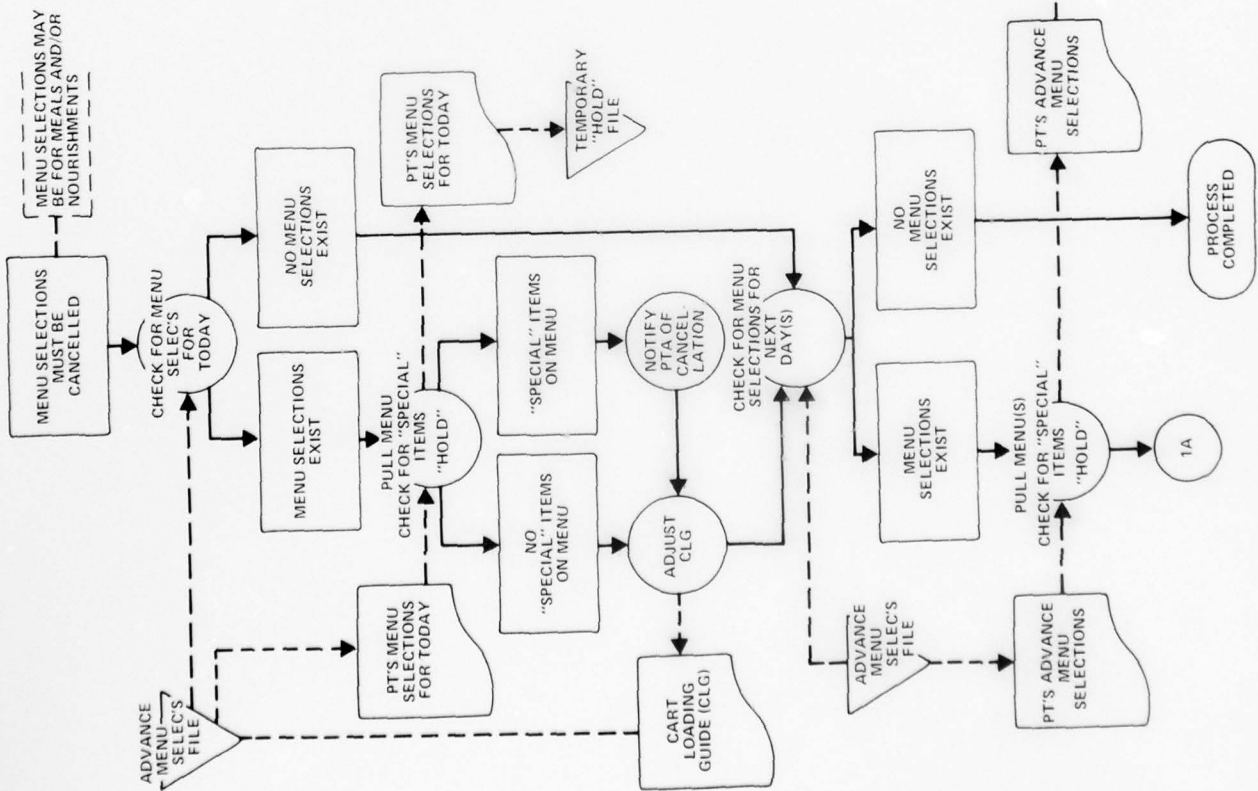
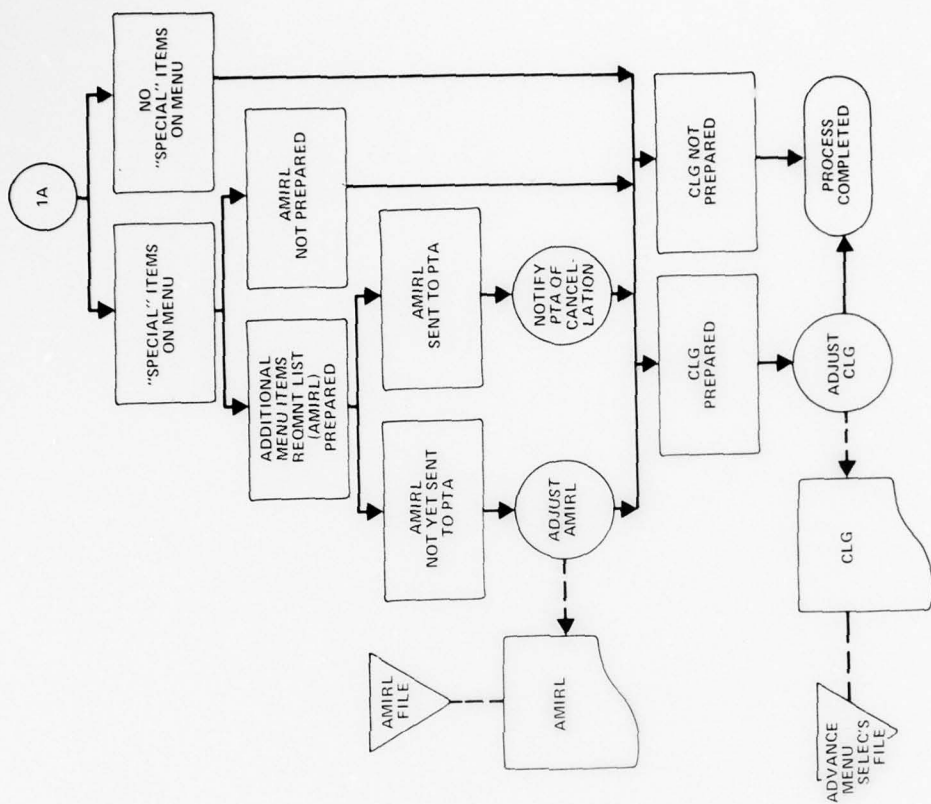
FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-INPATIENT
DIET ORDER VALIDATION PROCESS
SHEET 1 OF 1 9 MAR 1975

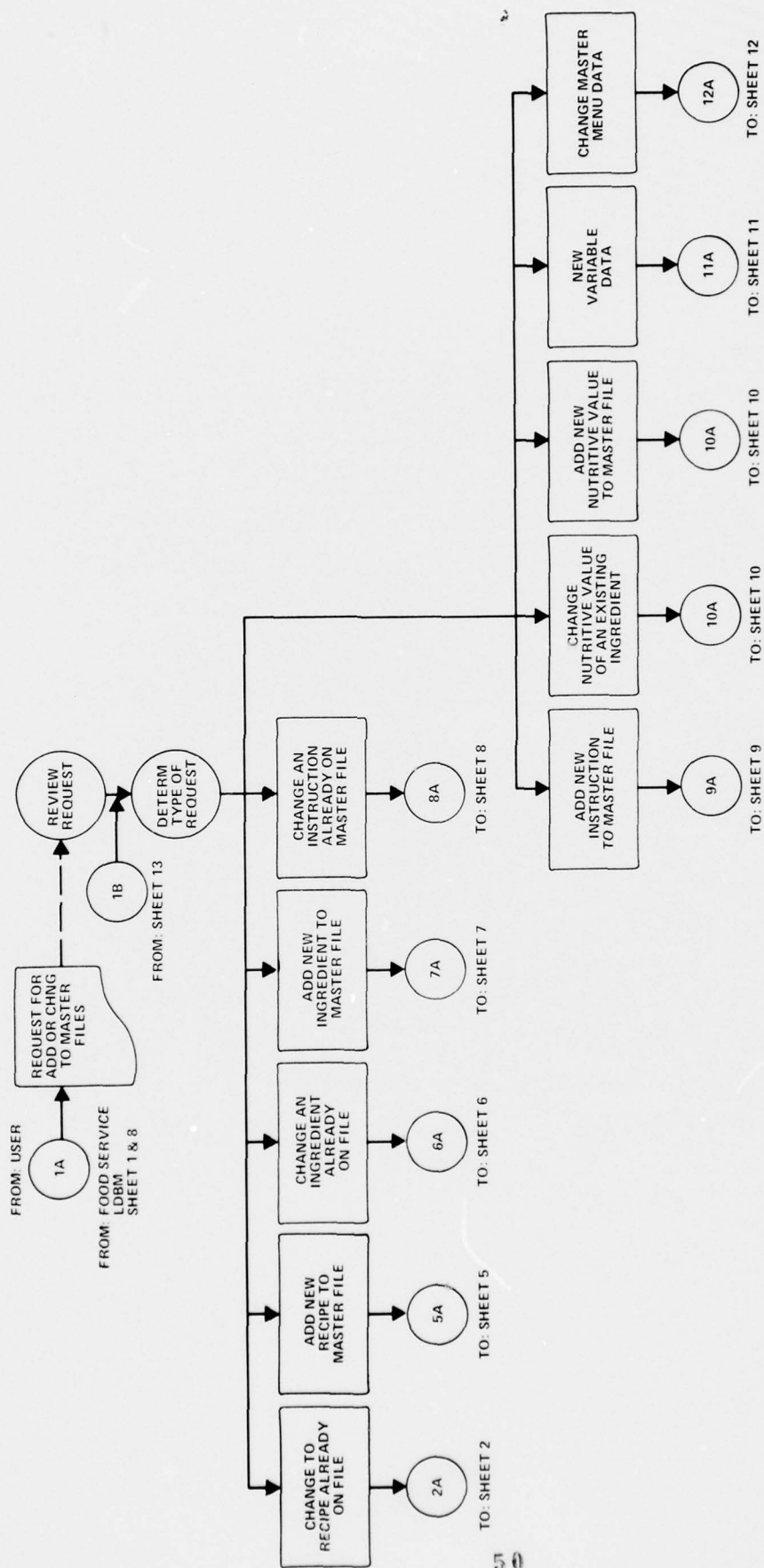


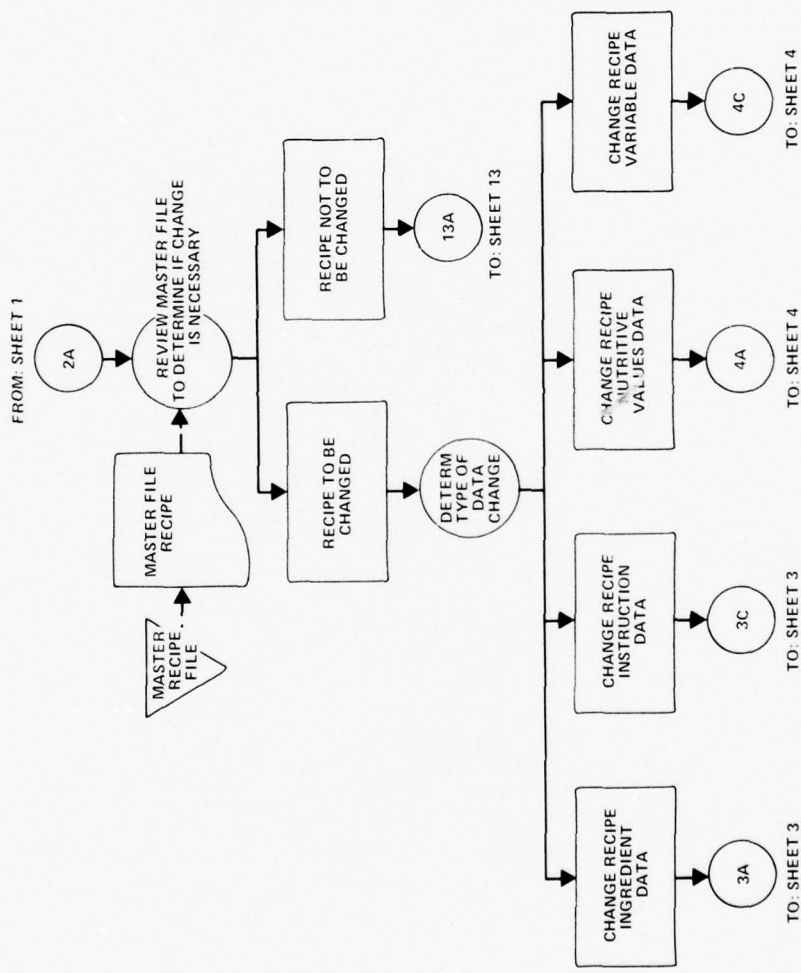


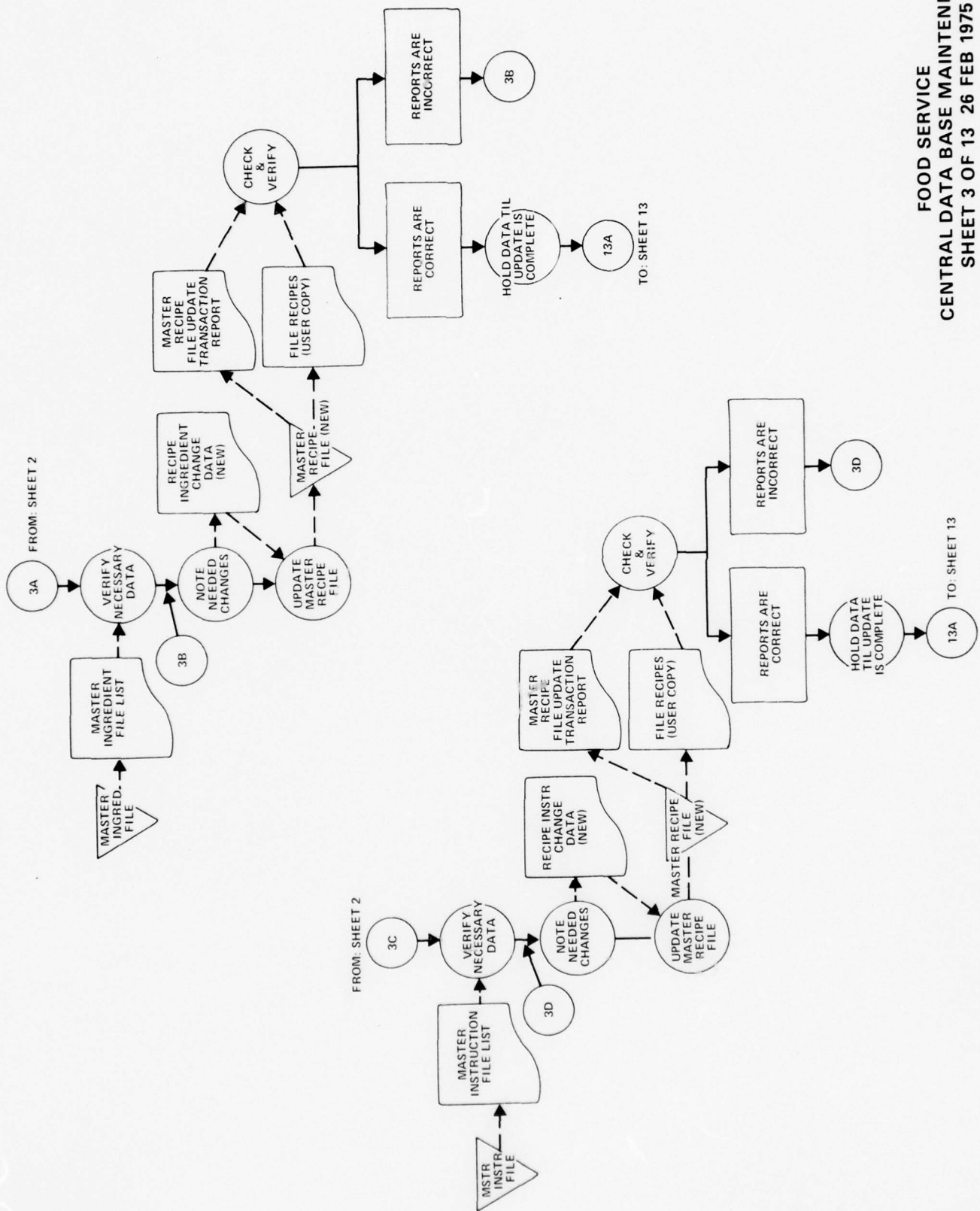


FOOD SERVICE SUBSYSTEM
CLINICAL SUPPORT-INPATIENT
MENU FINALIZATION PROCESS
SHEET 1 OF 1 9 MAR 1975

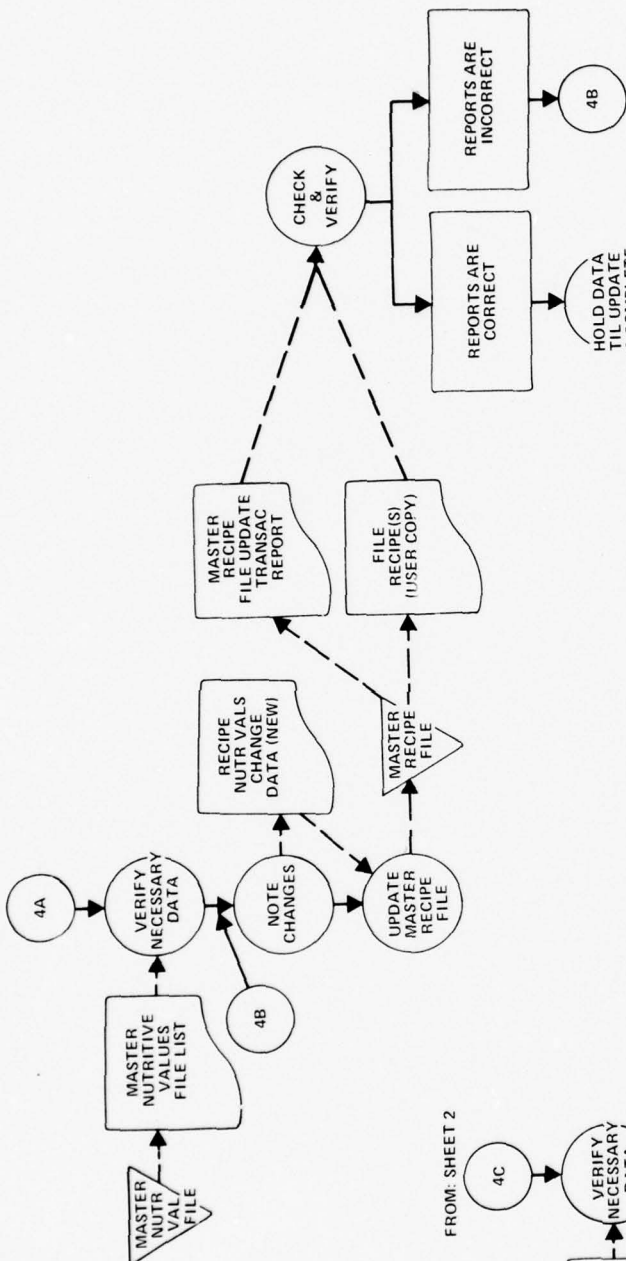




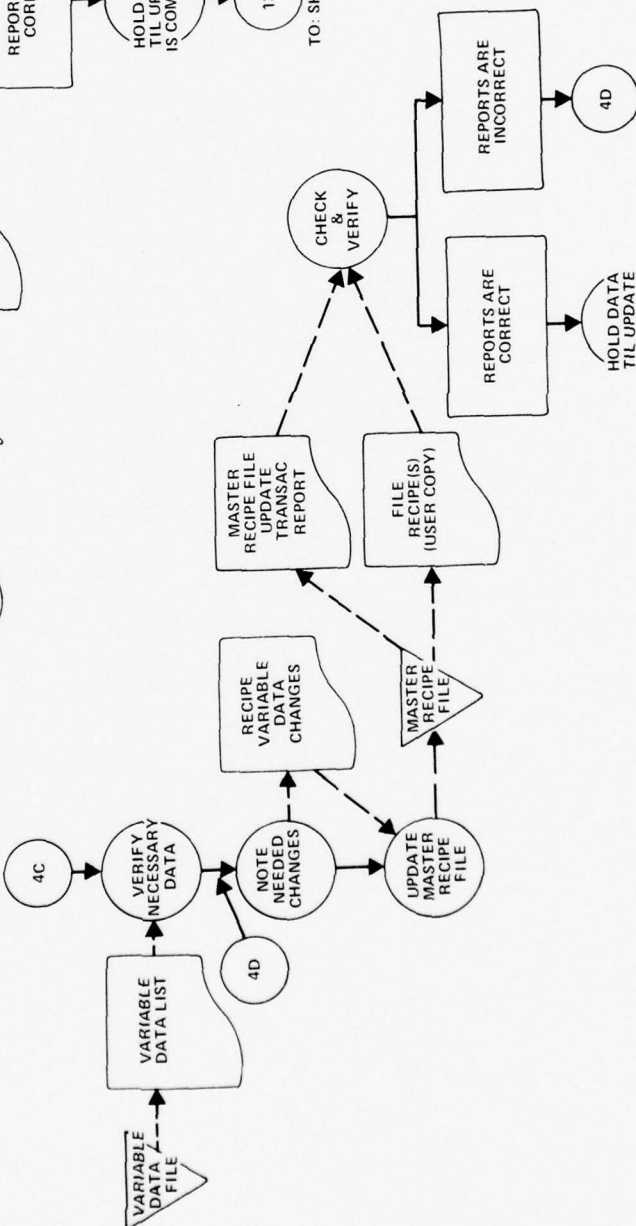


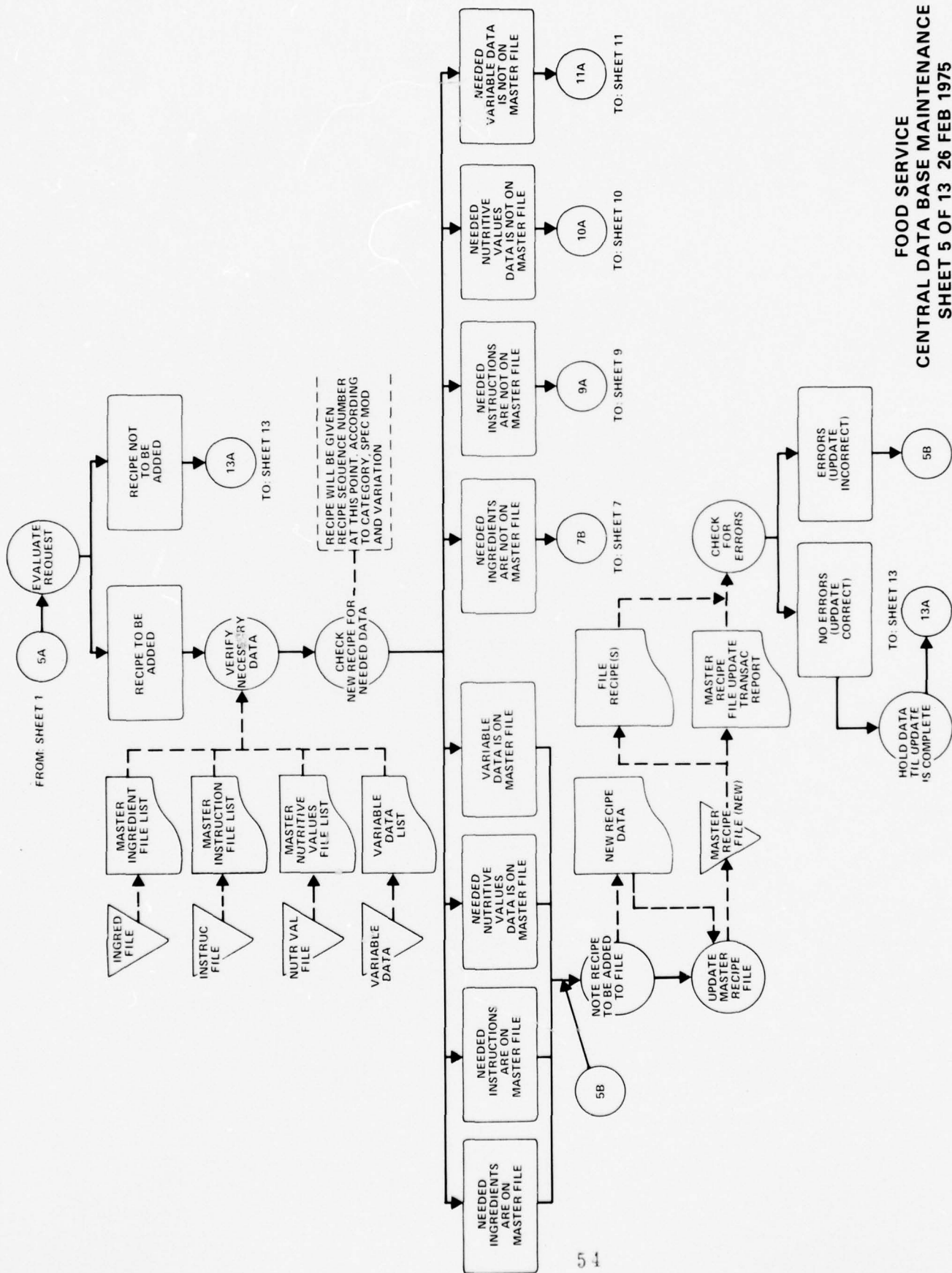


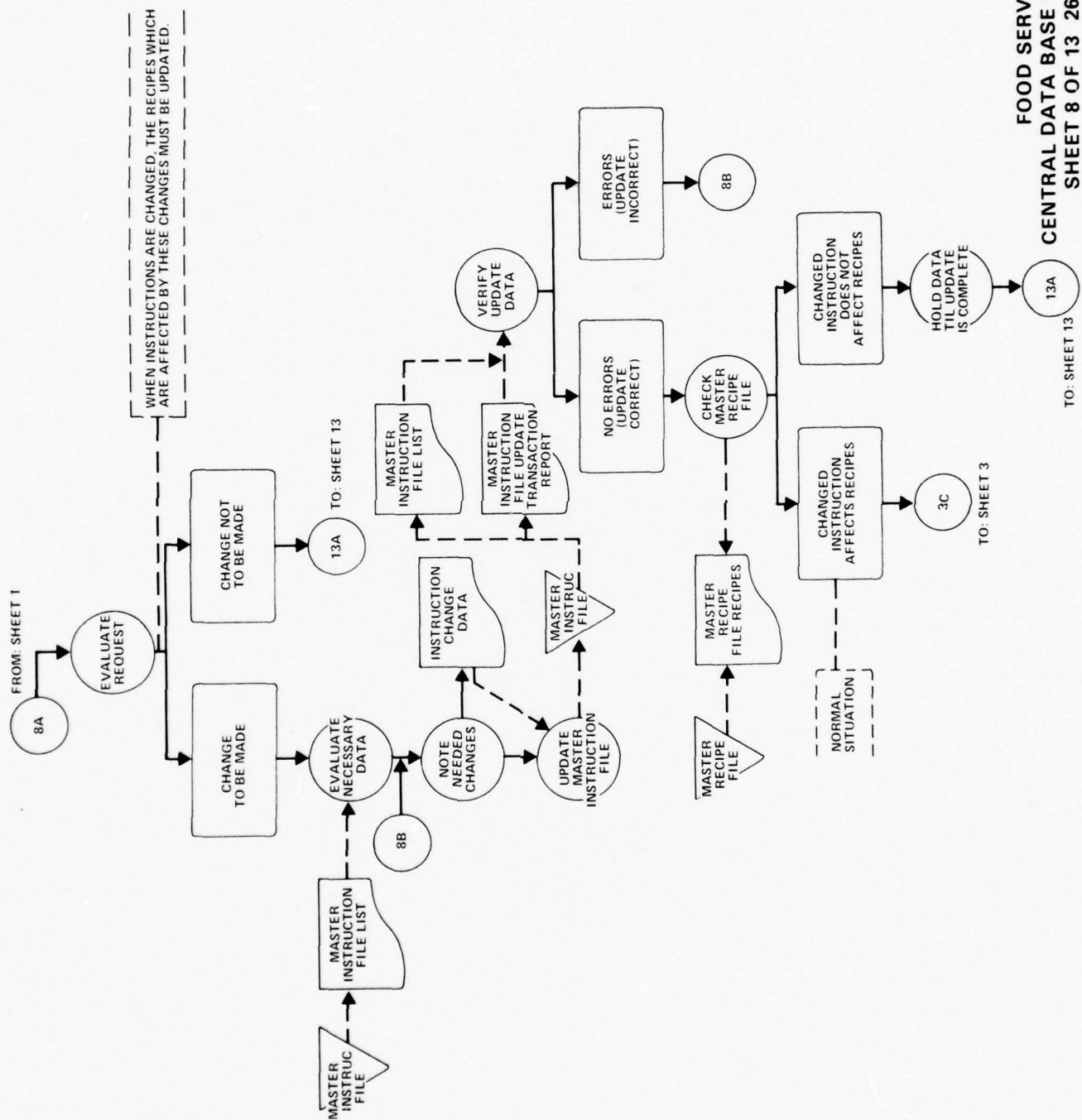
FROM: SHEET 2



FROM: SHEET 2



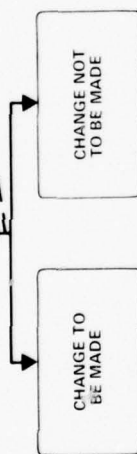




FROM SHEET 1

6A

WHEN INGREDIENT IS ALREADY ON FILE, ANY CHANGES WILL ALSO AFFECT RECIPES IN WHICH THAT INGREDIENT IS USED. THUS, IT WILL BE NECESSARY TO UPDATE THE RECIPE FILE TO REFLECT CHANGES IN INGREDIENTS.



TO: SHEET 13

MASTER RECIPE FILE

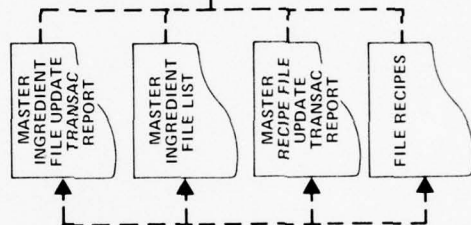
MASTER INGRED FILE

MASTER RECIPE FILE LIST

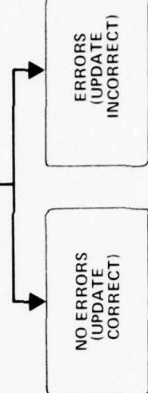
MASTER INGREDIENT FILE LIST

RECIPE INGREDIENT CHANGE DATA

55

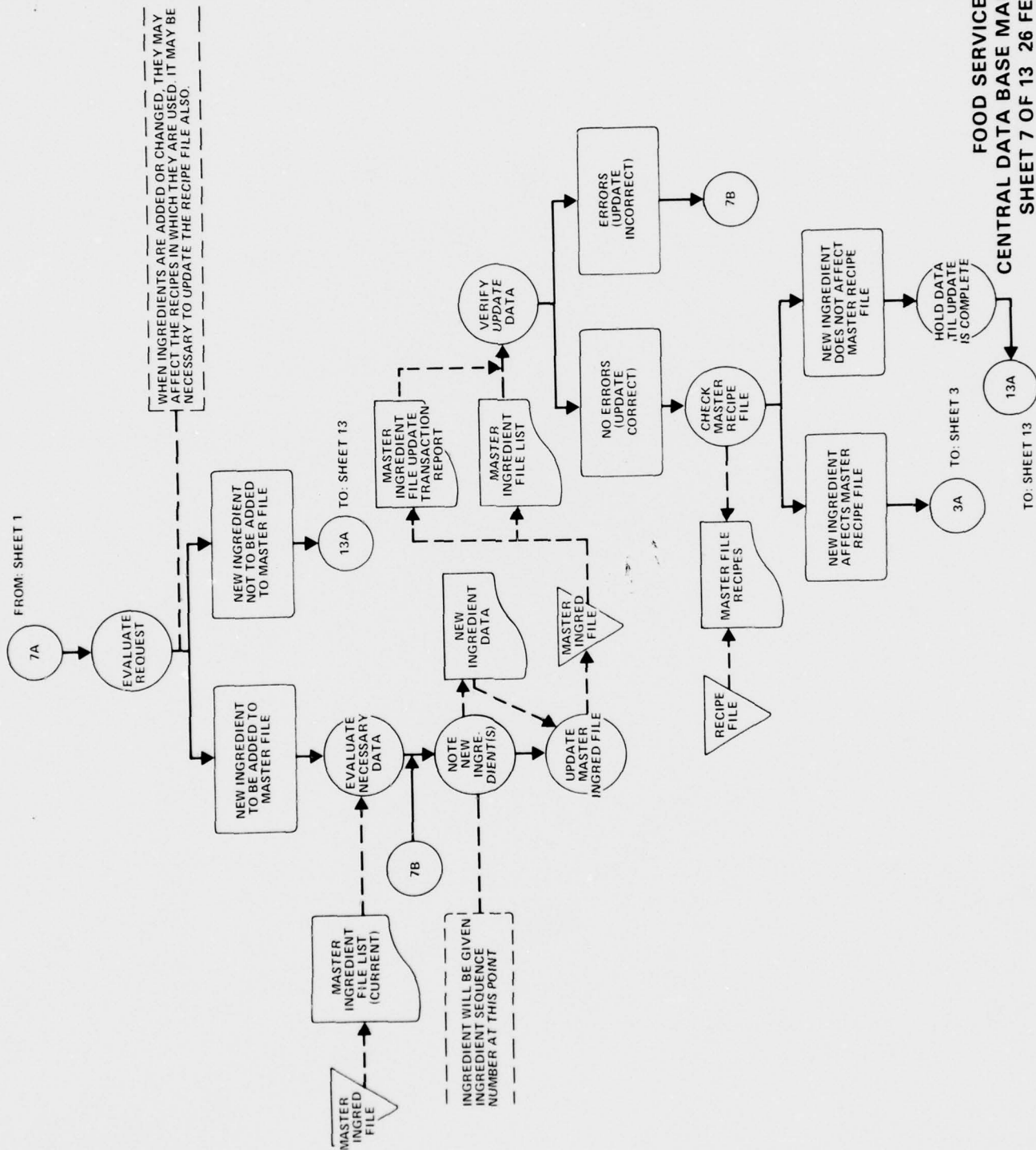


VERIFY UPDATE DATA

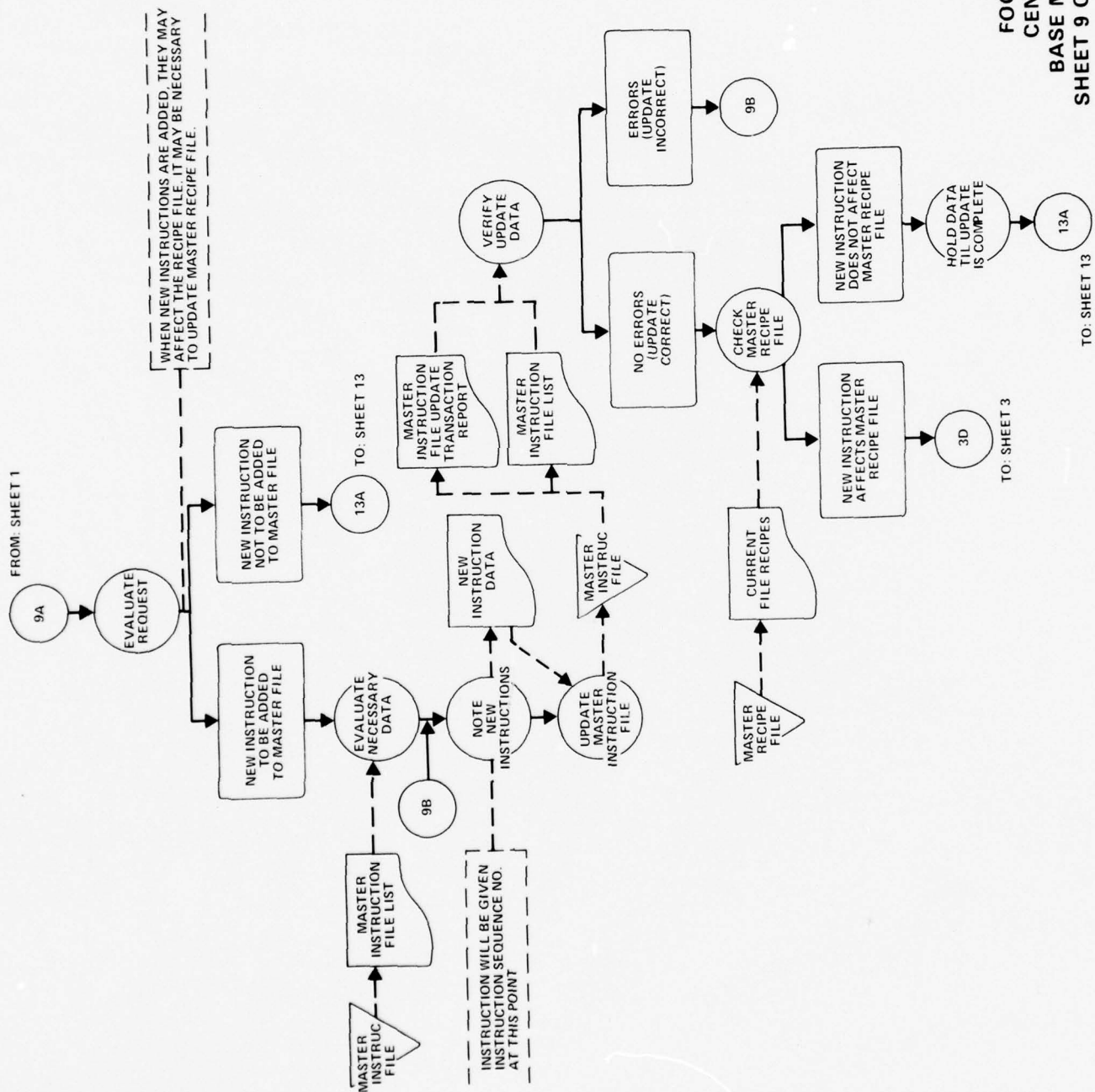


FOOD SERVICE
CENTRAL DATA
BASE MAINTENANCE
SHEET 6 OF 13 26 FEB 1975

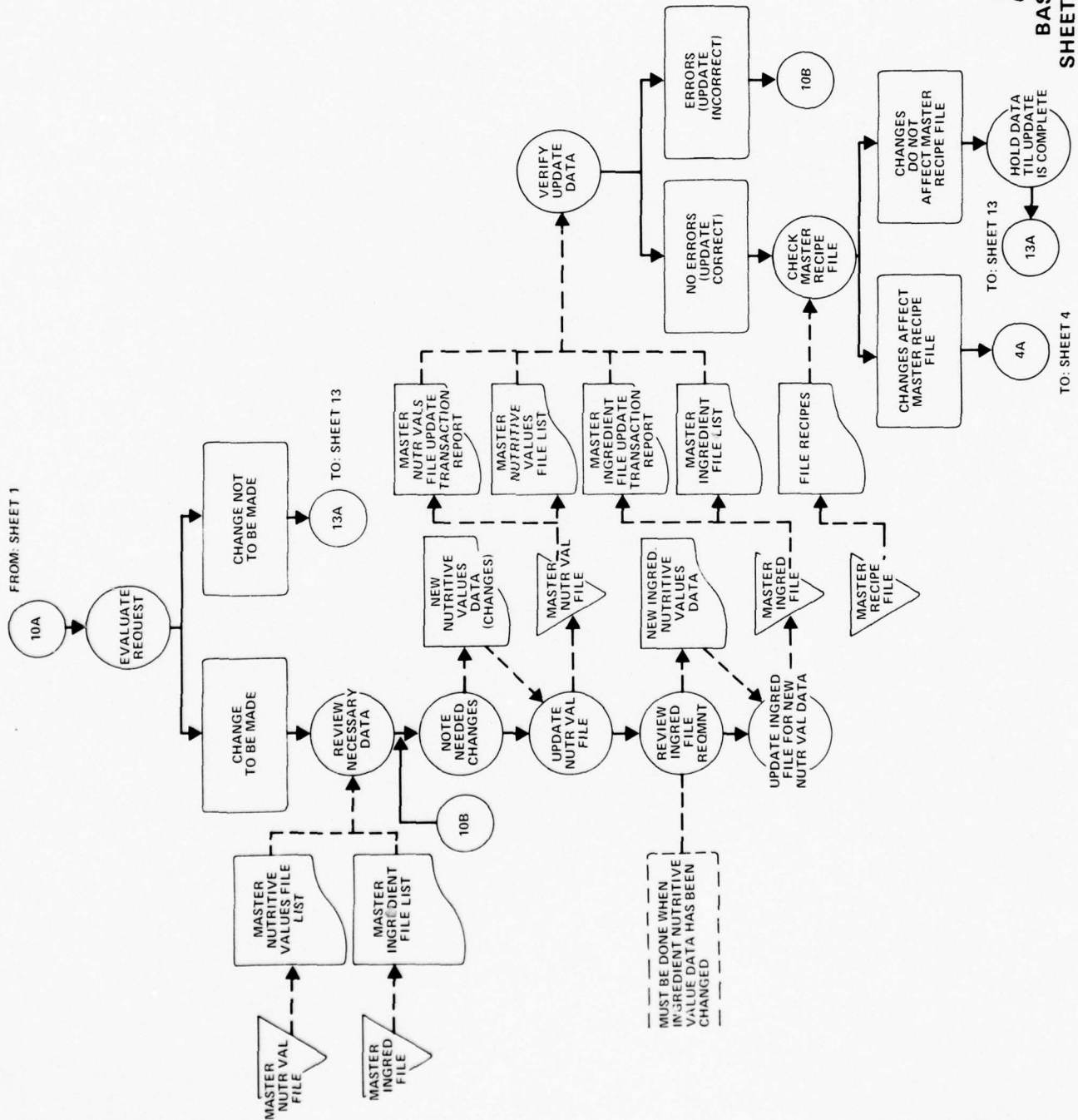
TO: SHEET 13



FOOD SERVICE
CENTRAL DATA BASE MAINTENANCE
SHEET 7 OF 13 26 FEB 1975

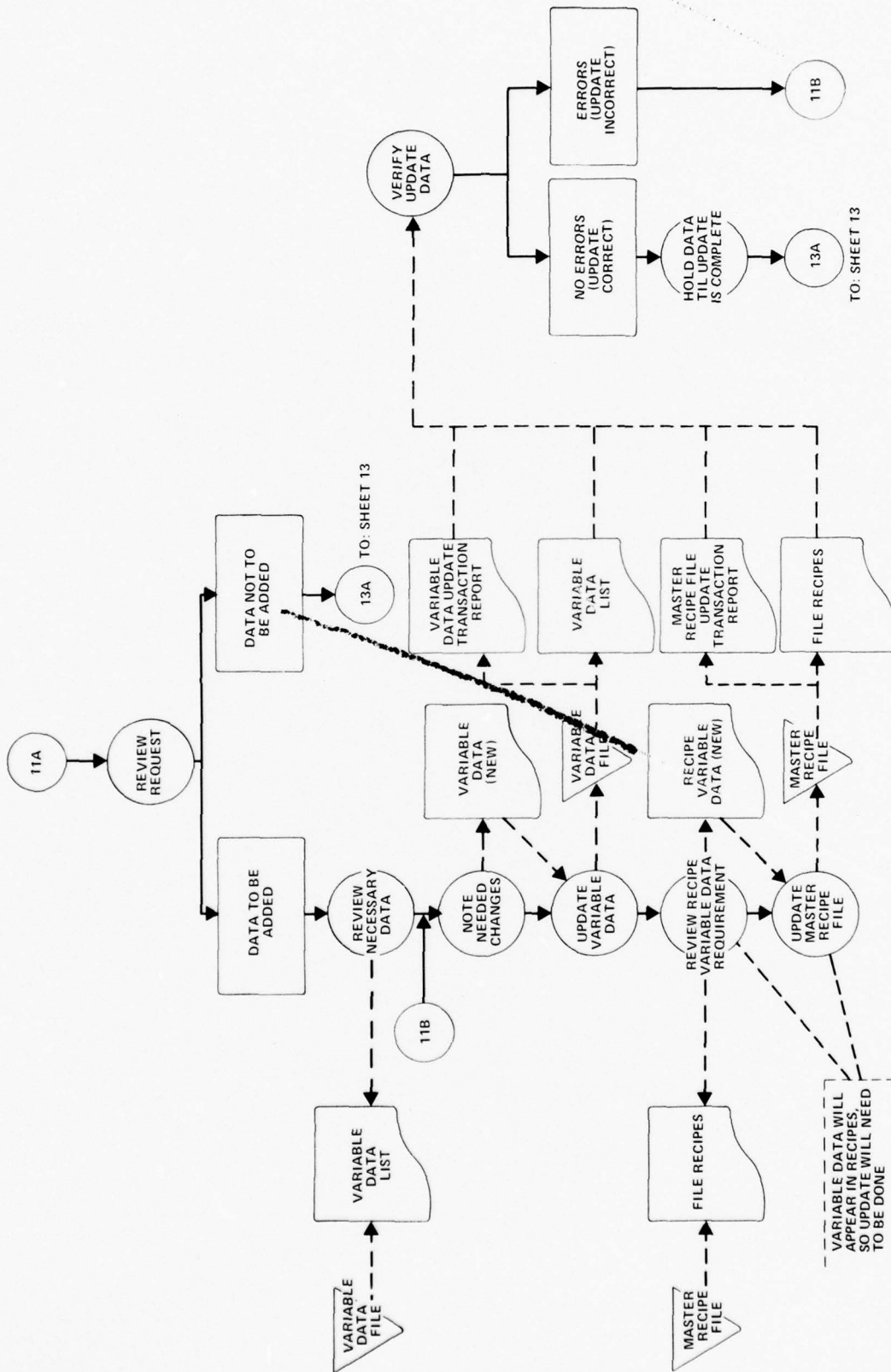


FROM: SHEET 1

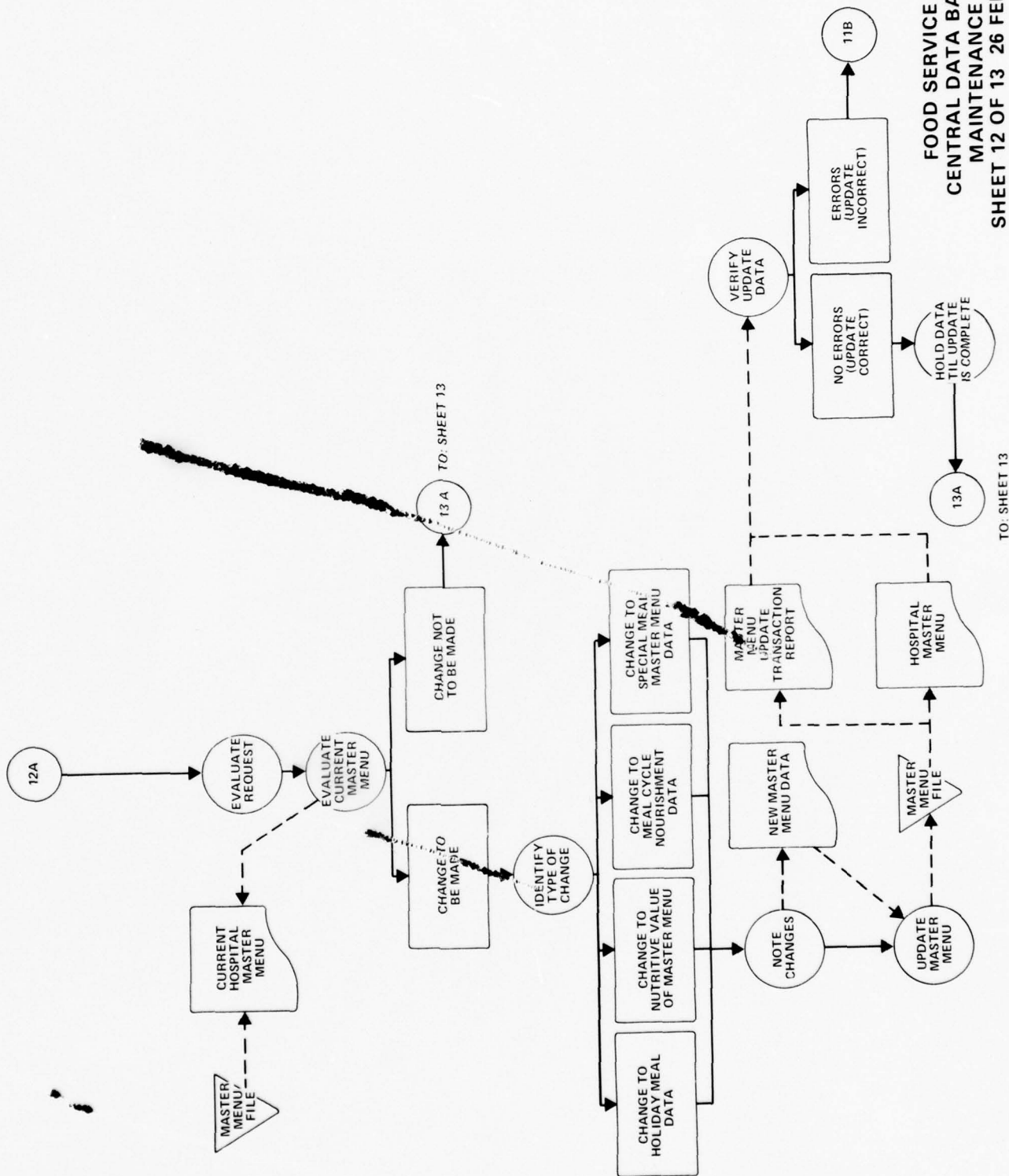


FOOD SERVICE
CENTRAL DATA
BASE MAINTENANCE
SHEET 10 OF 13 26 FEB 1975

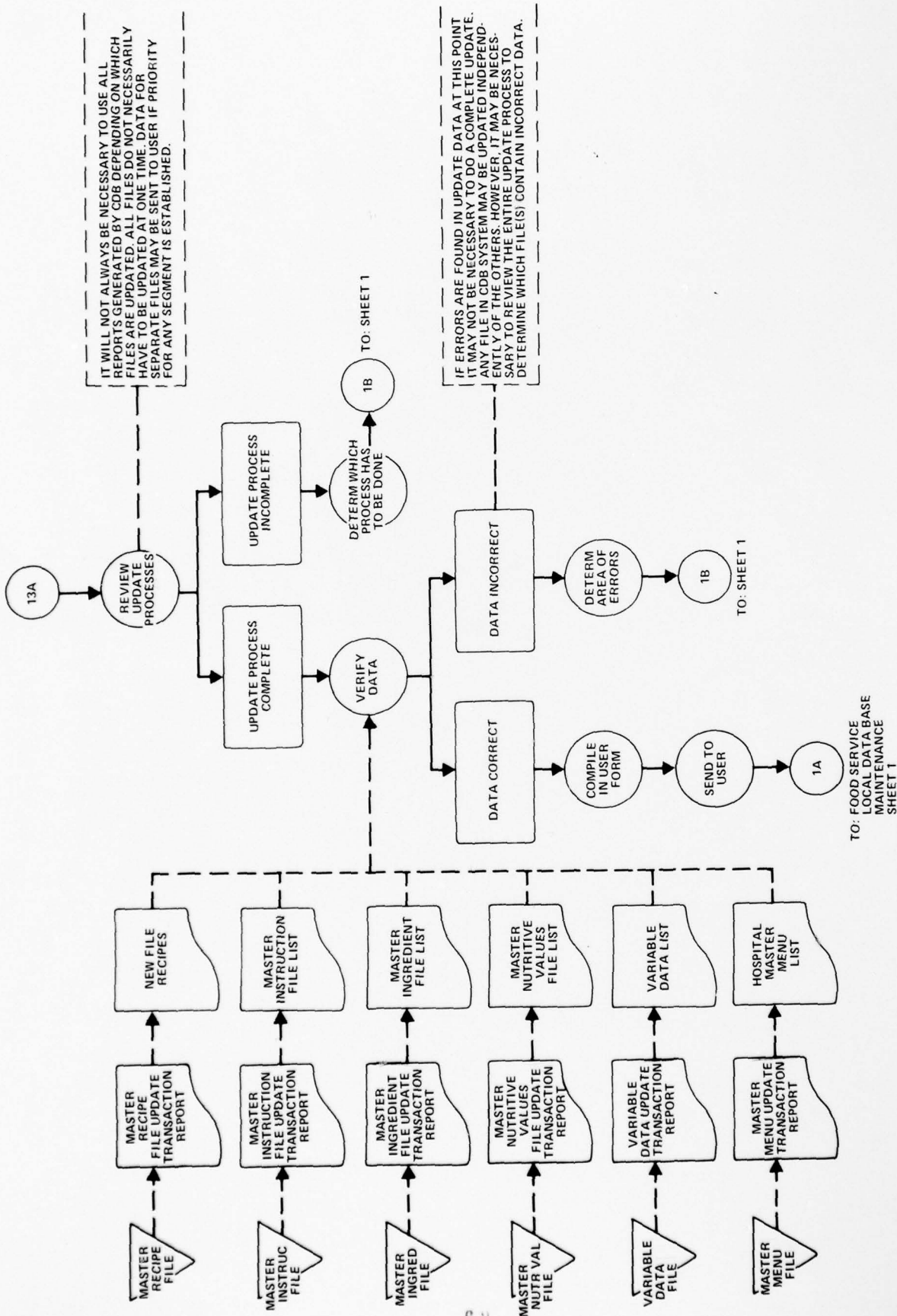
FROM: SHEET 1

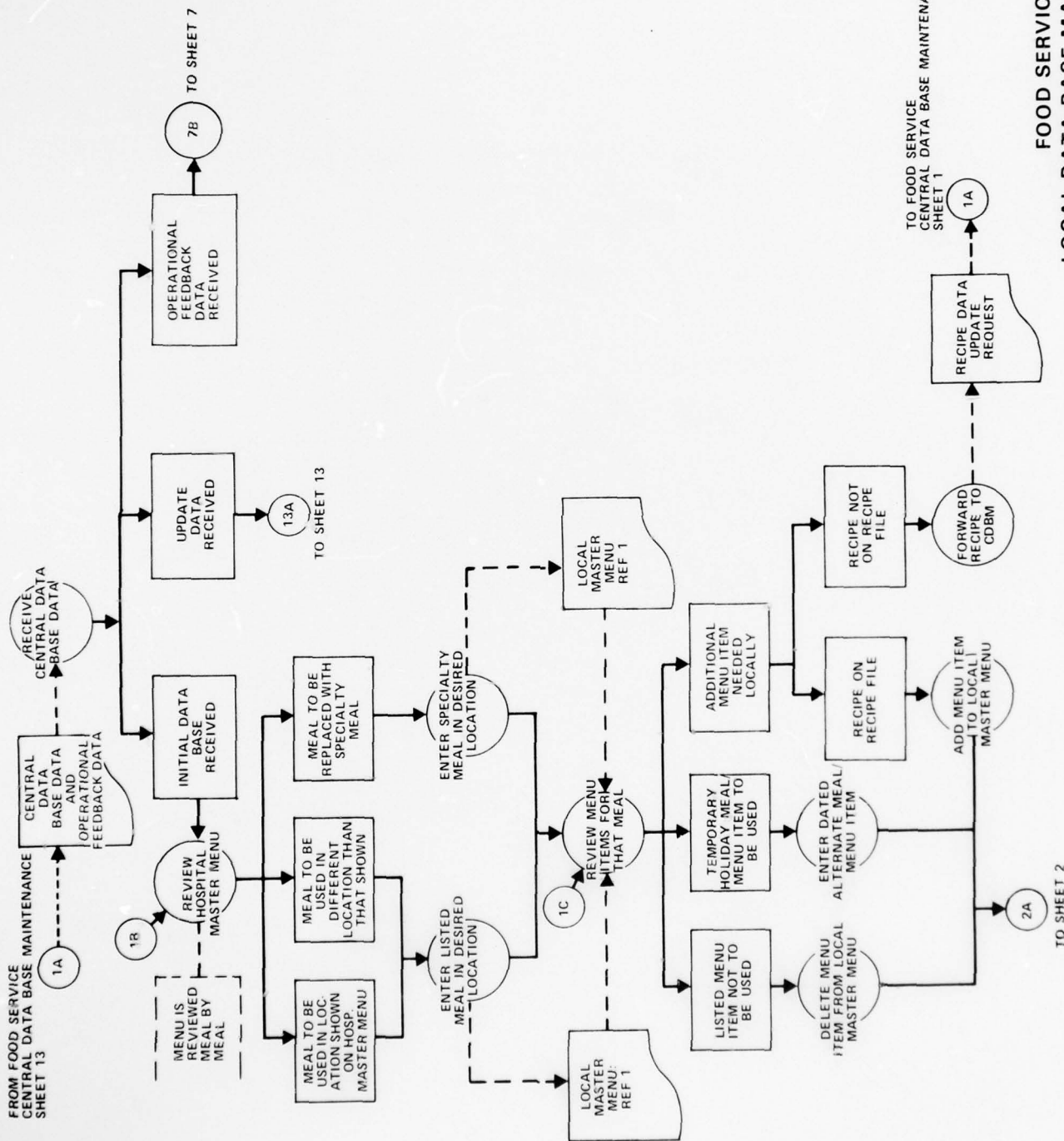


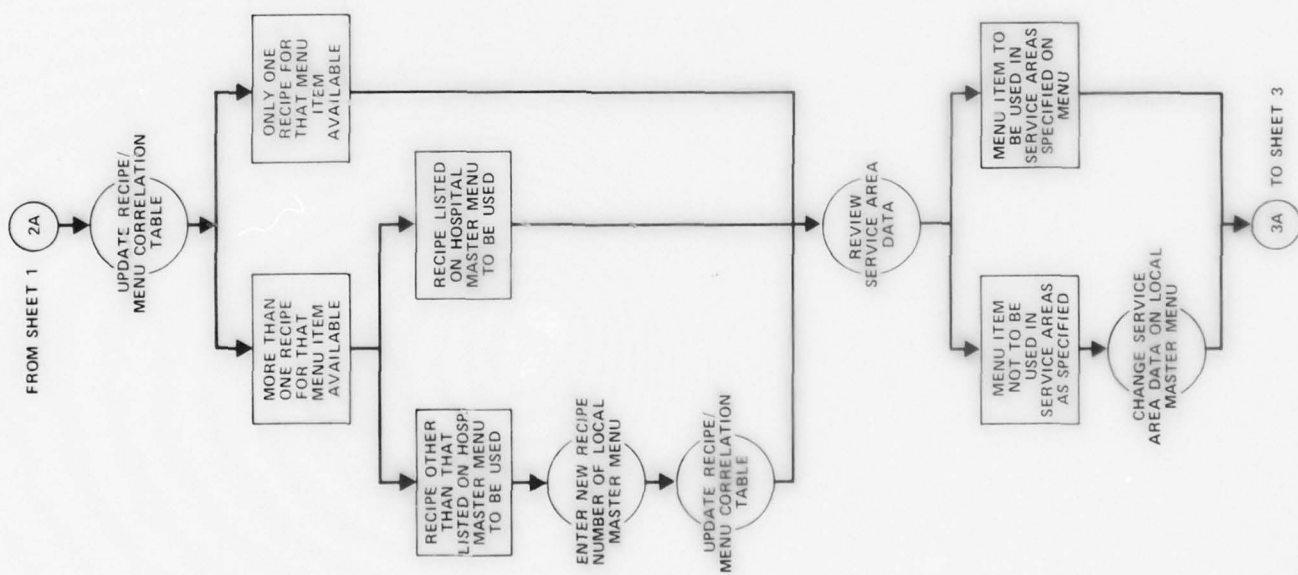
FROM: SHEET 1

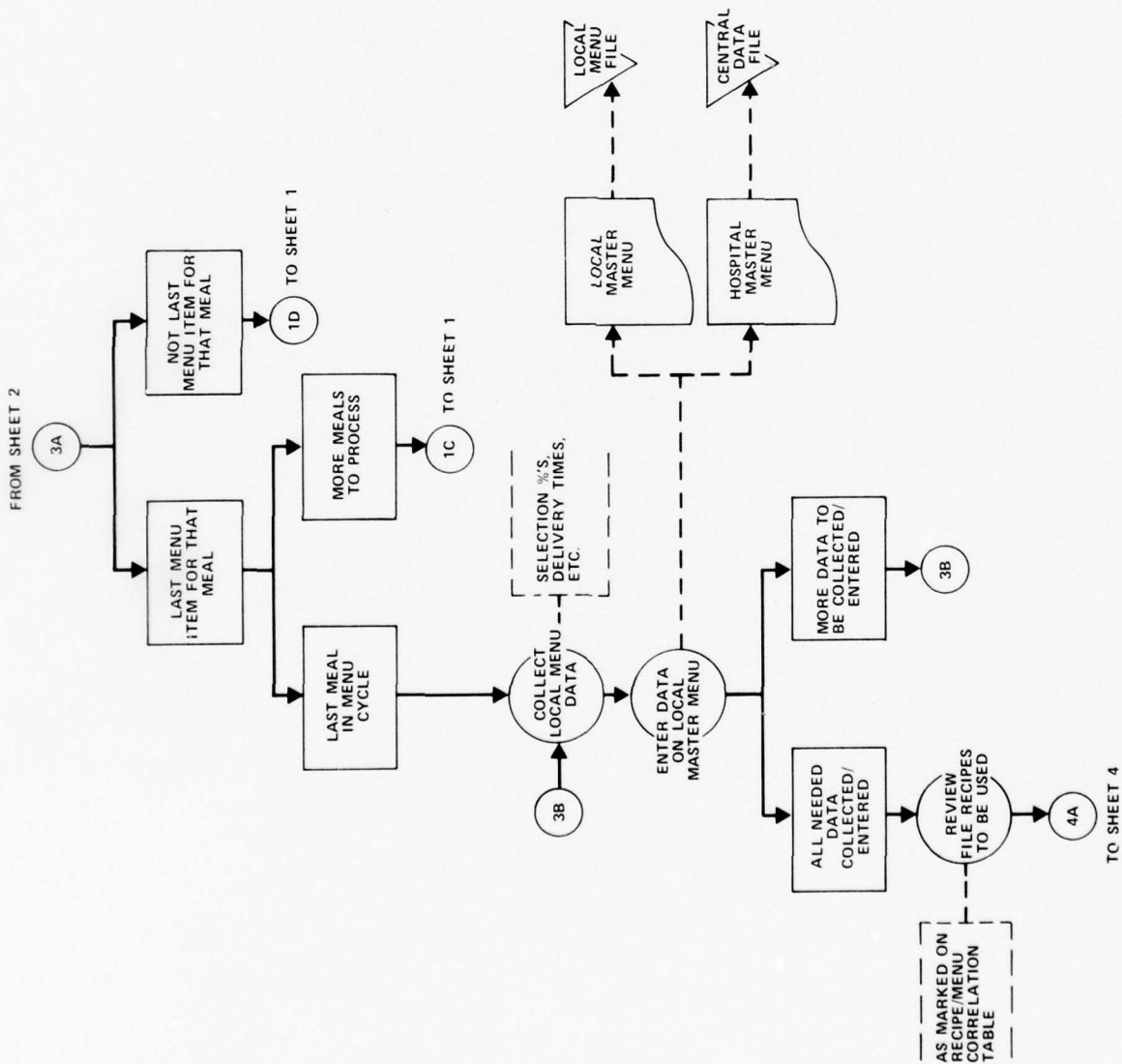


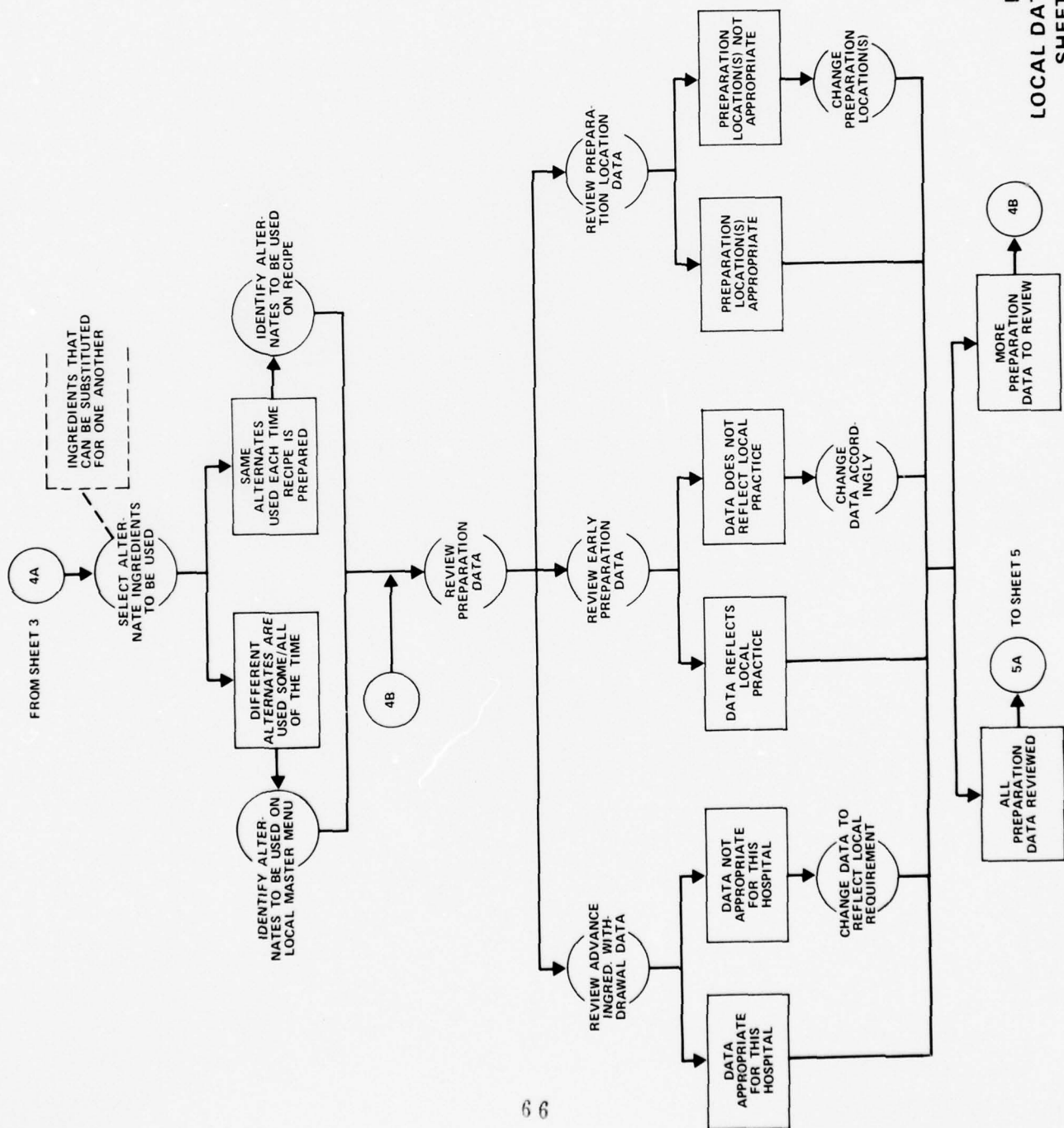
FROM: SHEETS 1-12

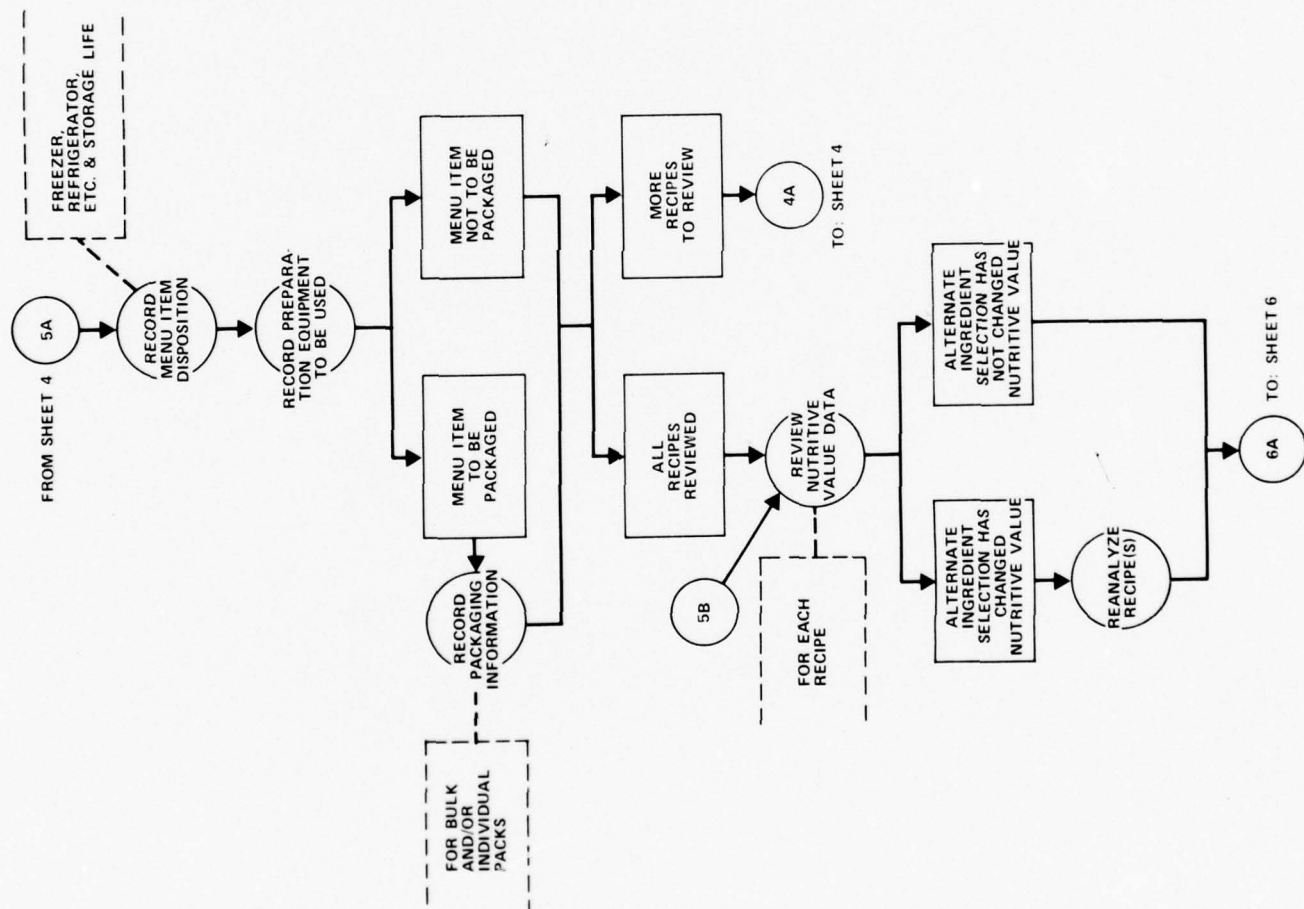




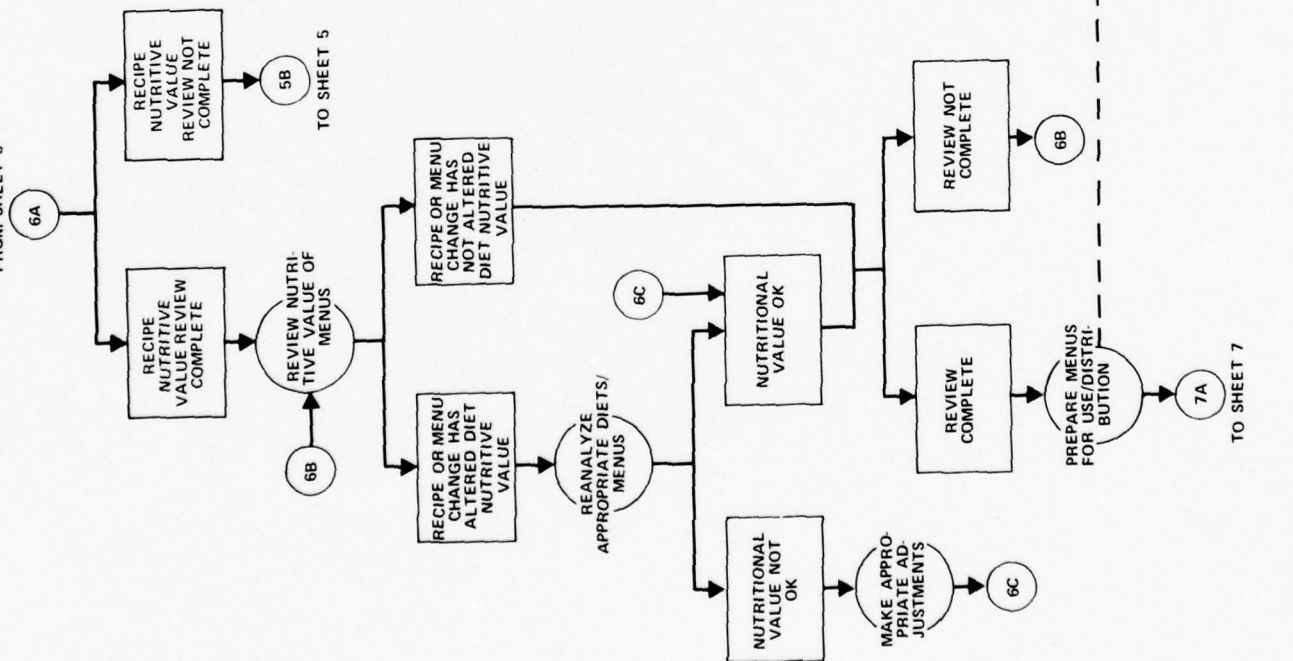


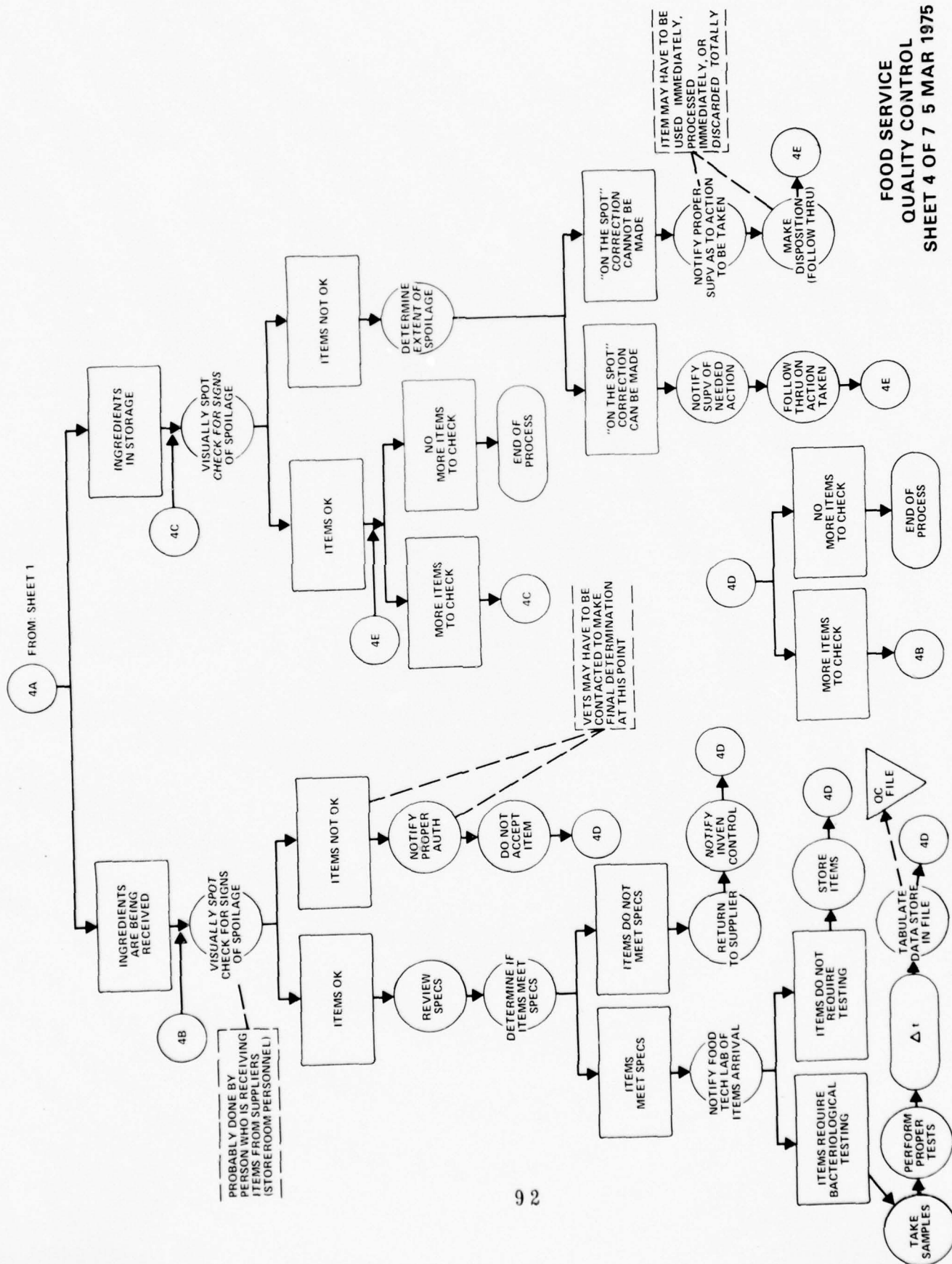




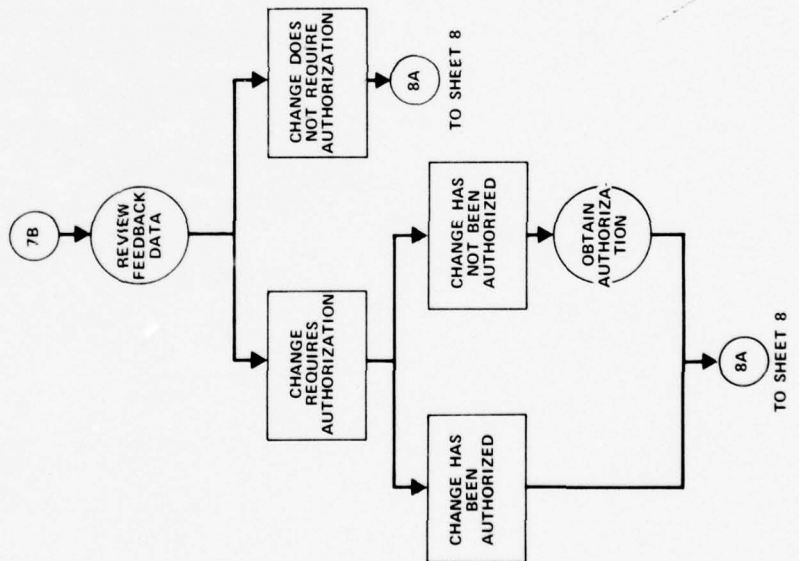
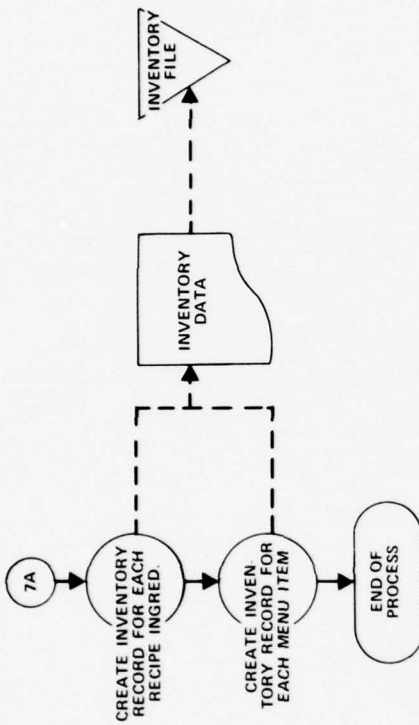


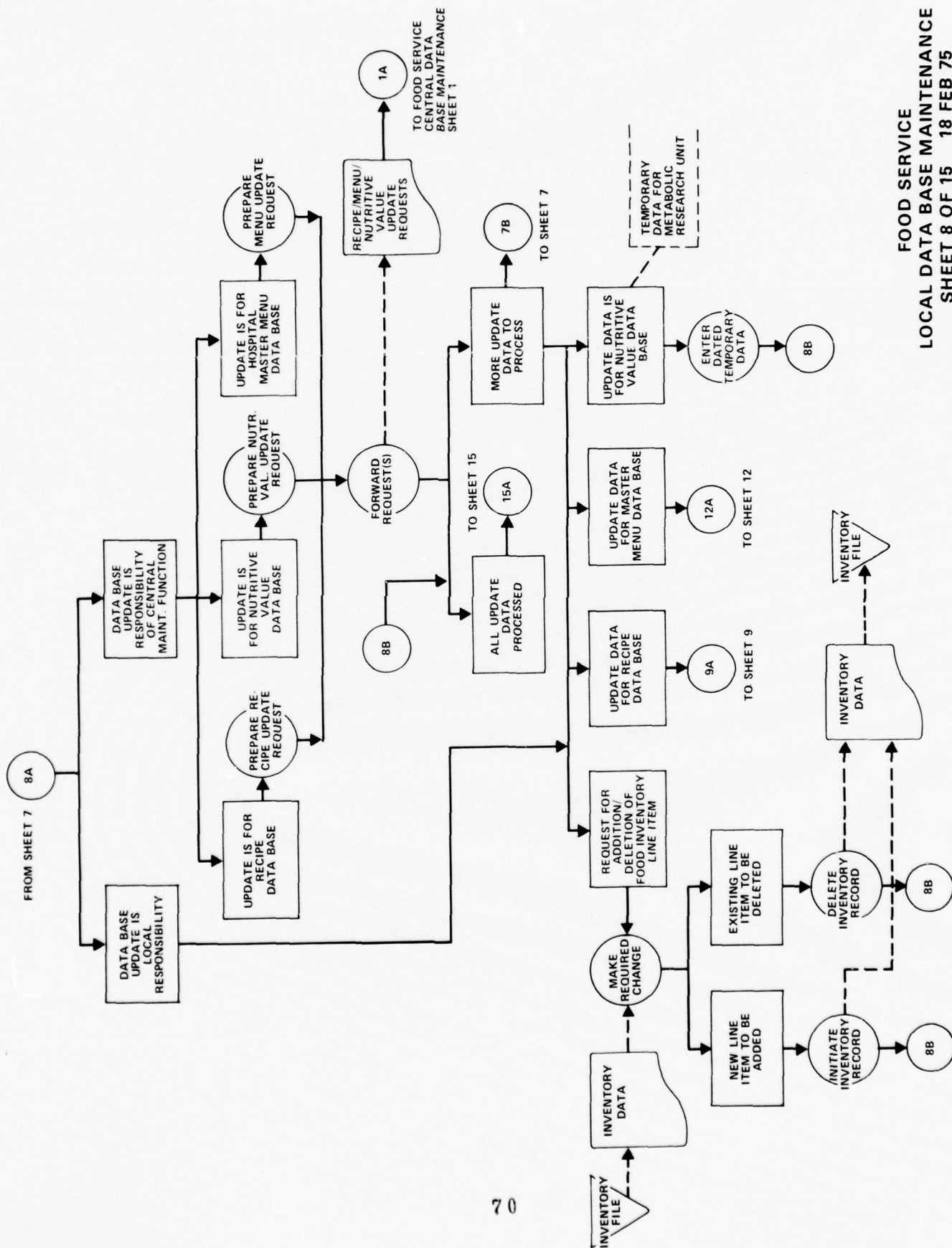
FROM SHEET 5



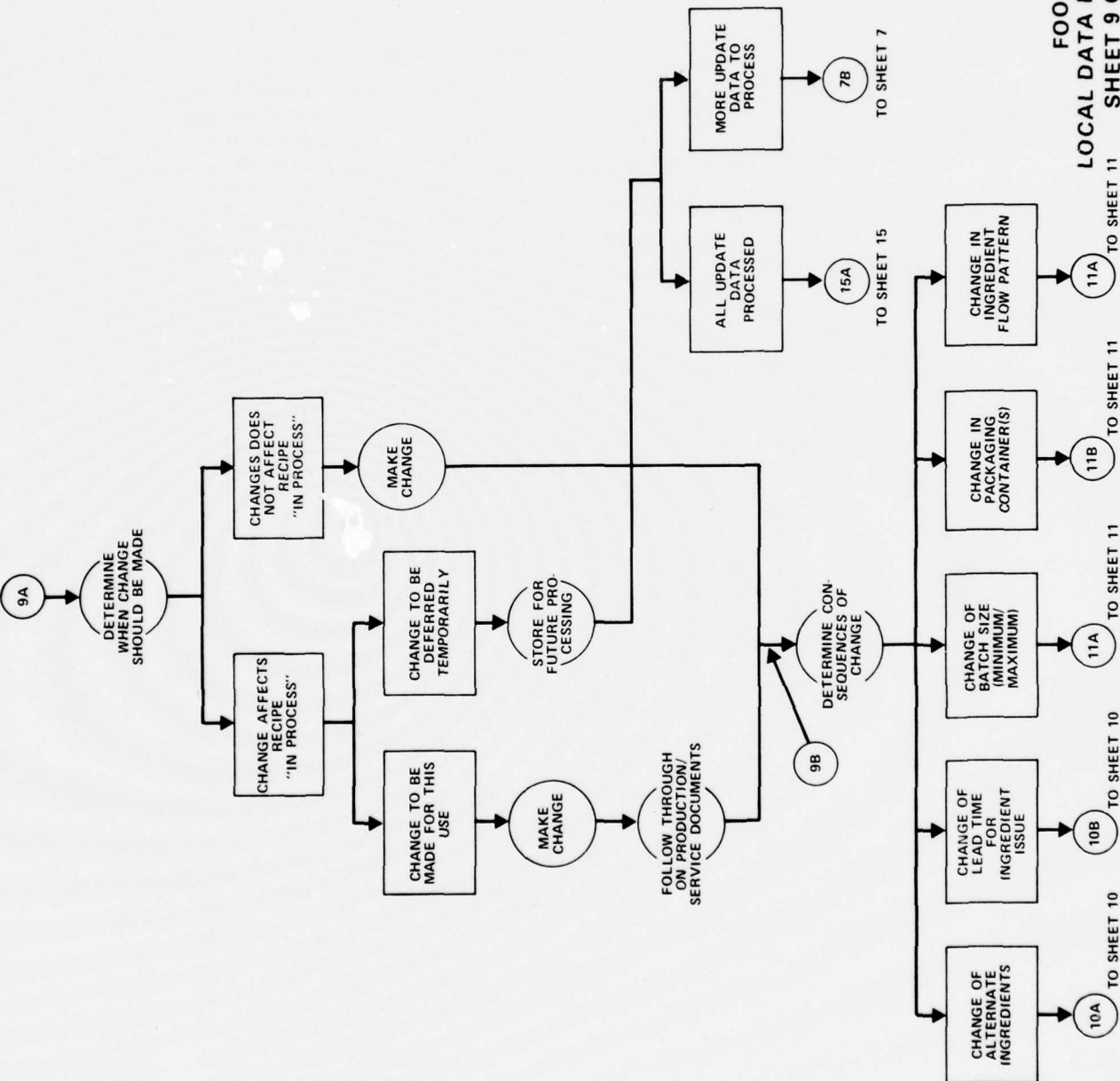


FROM SHEET 6

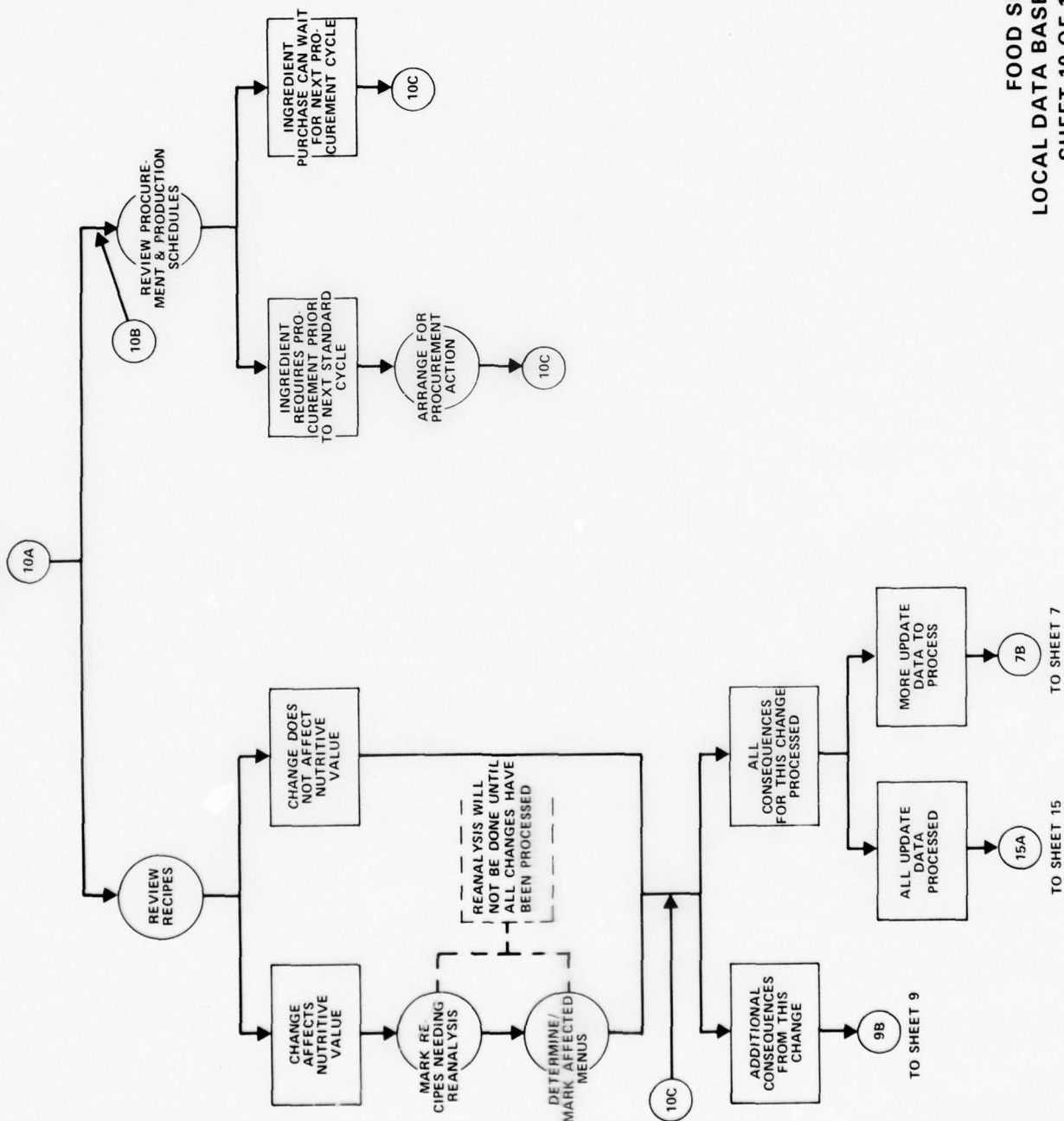




FROM SHEET 8

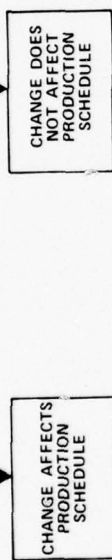


FROM SHEET 9



FROM SHEET 9

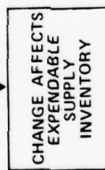
11A



NOTIFY
MIPS
FUNCTION

FROM SHEET 9

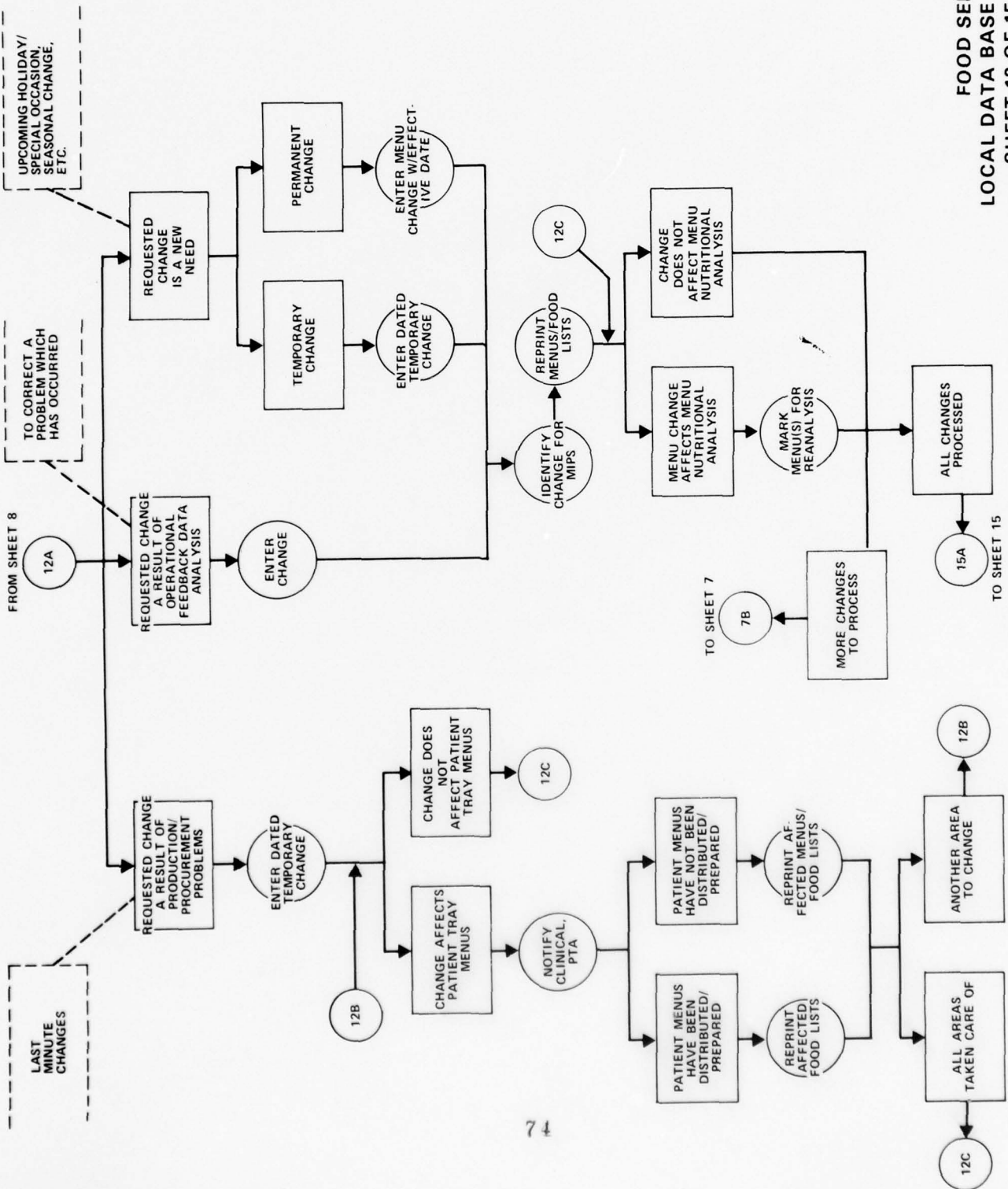
11B

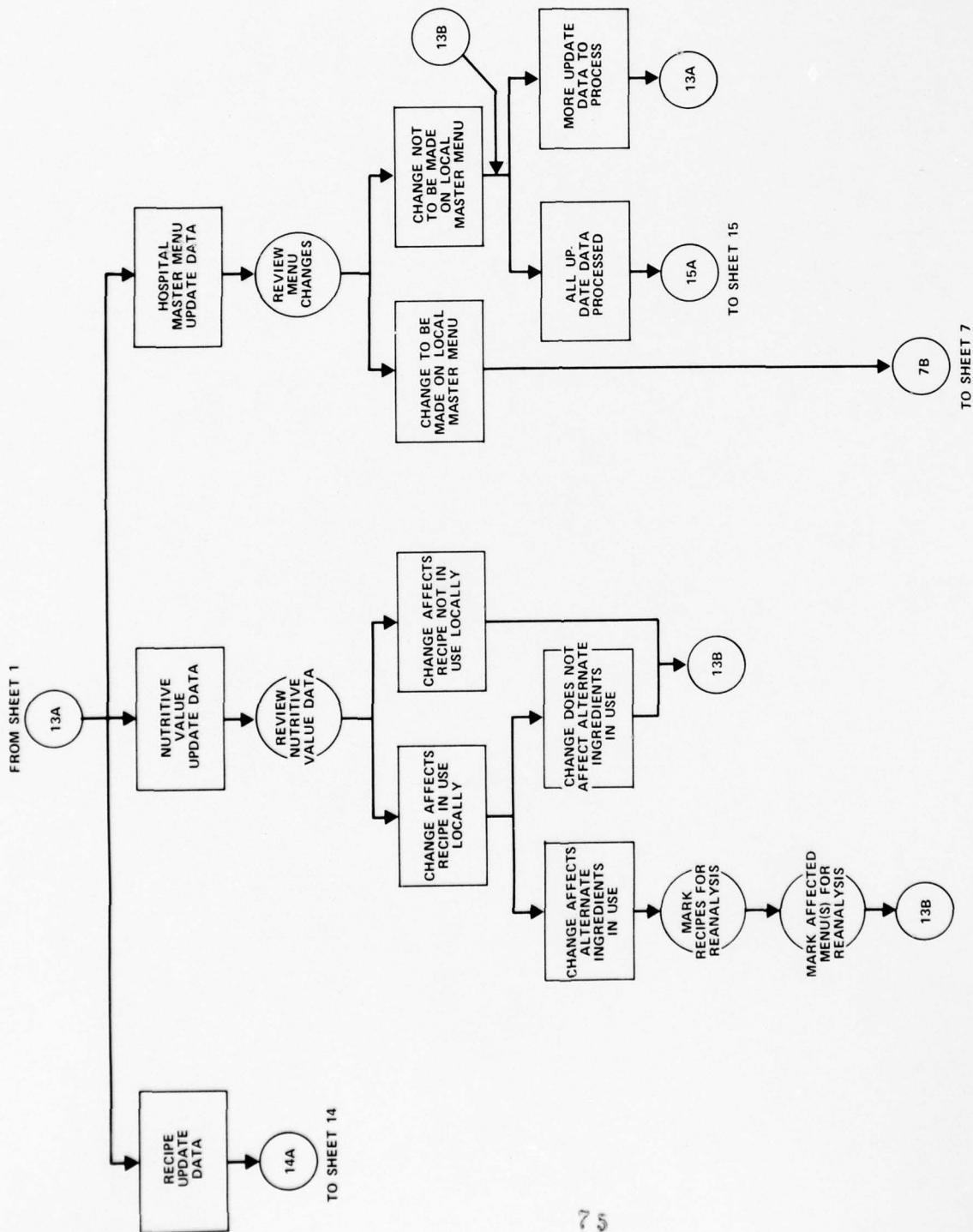


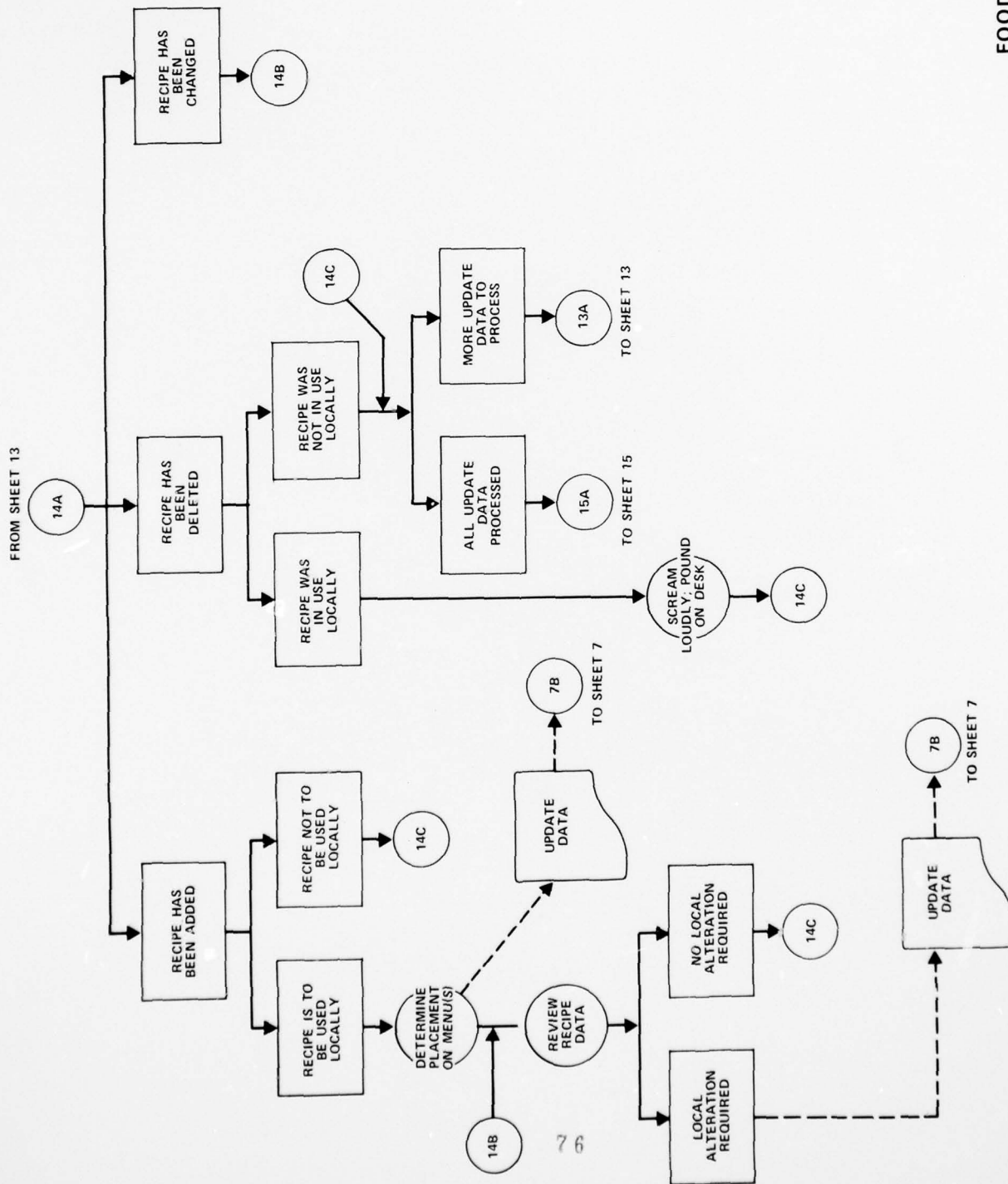
TAKE
APPROPRIATE
ACTION

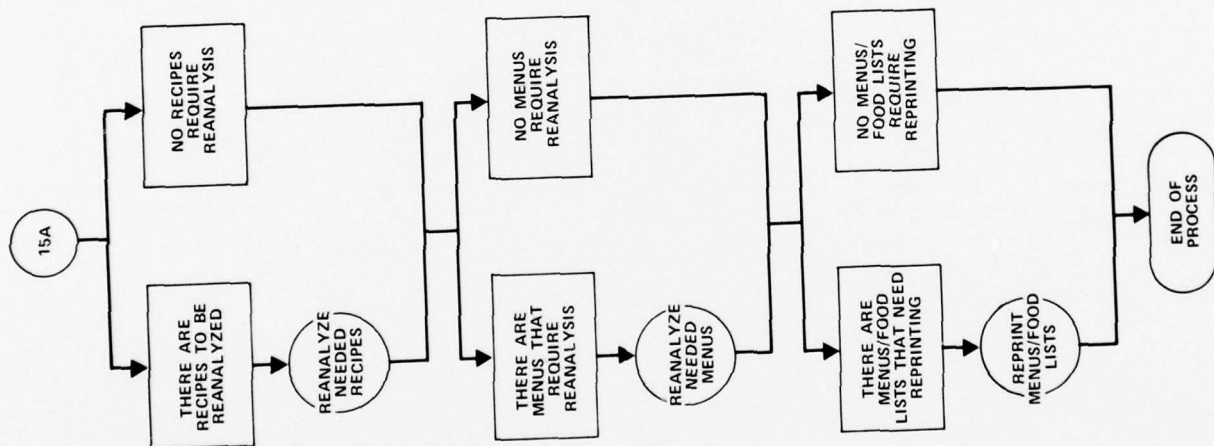
10C

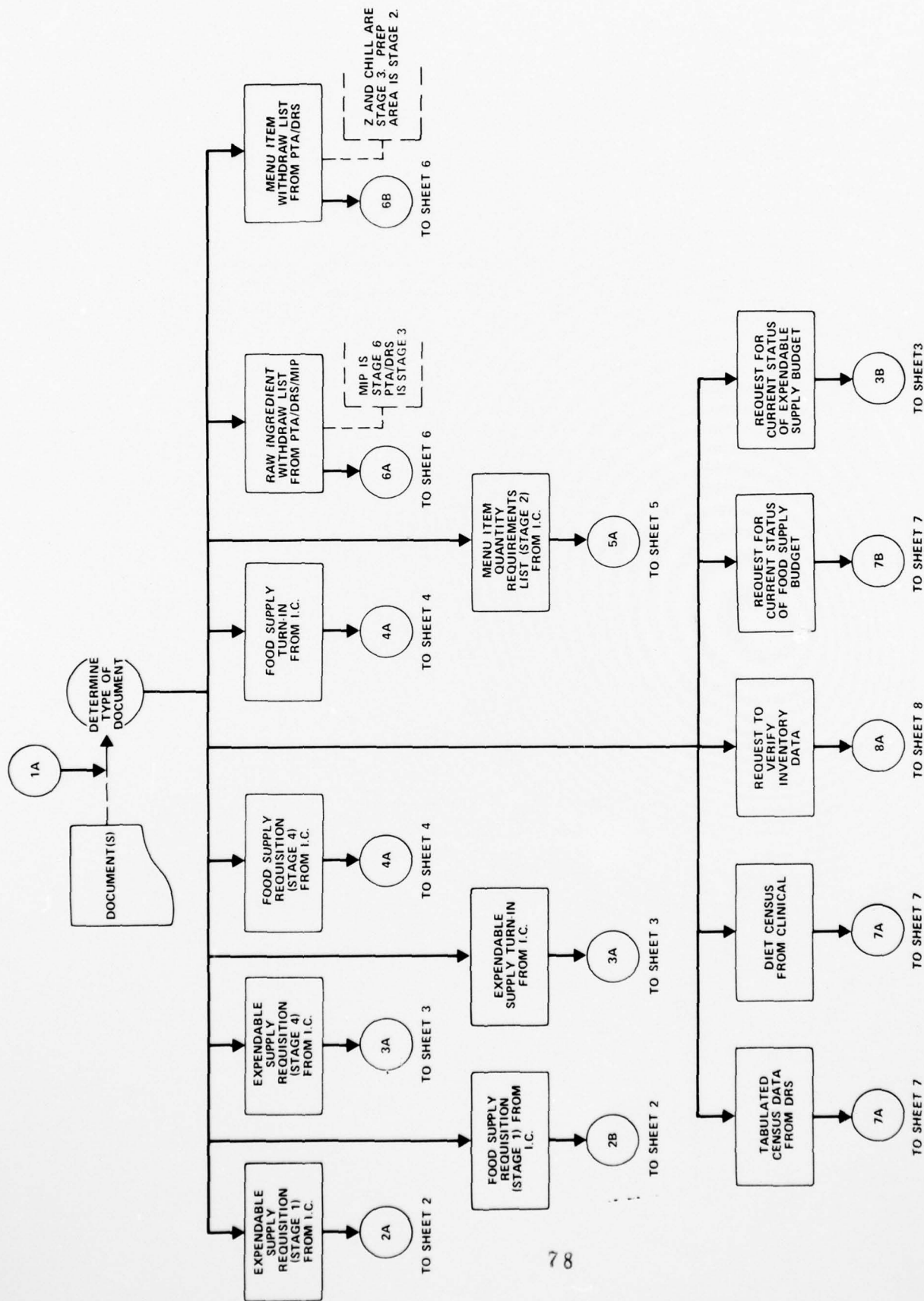
TO SHEET 10

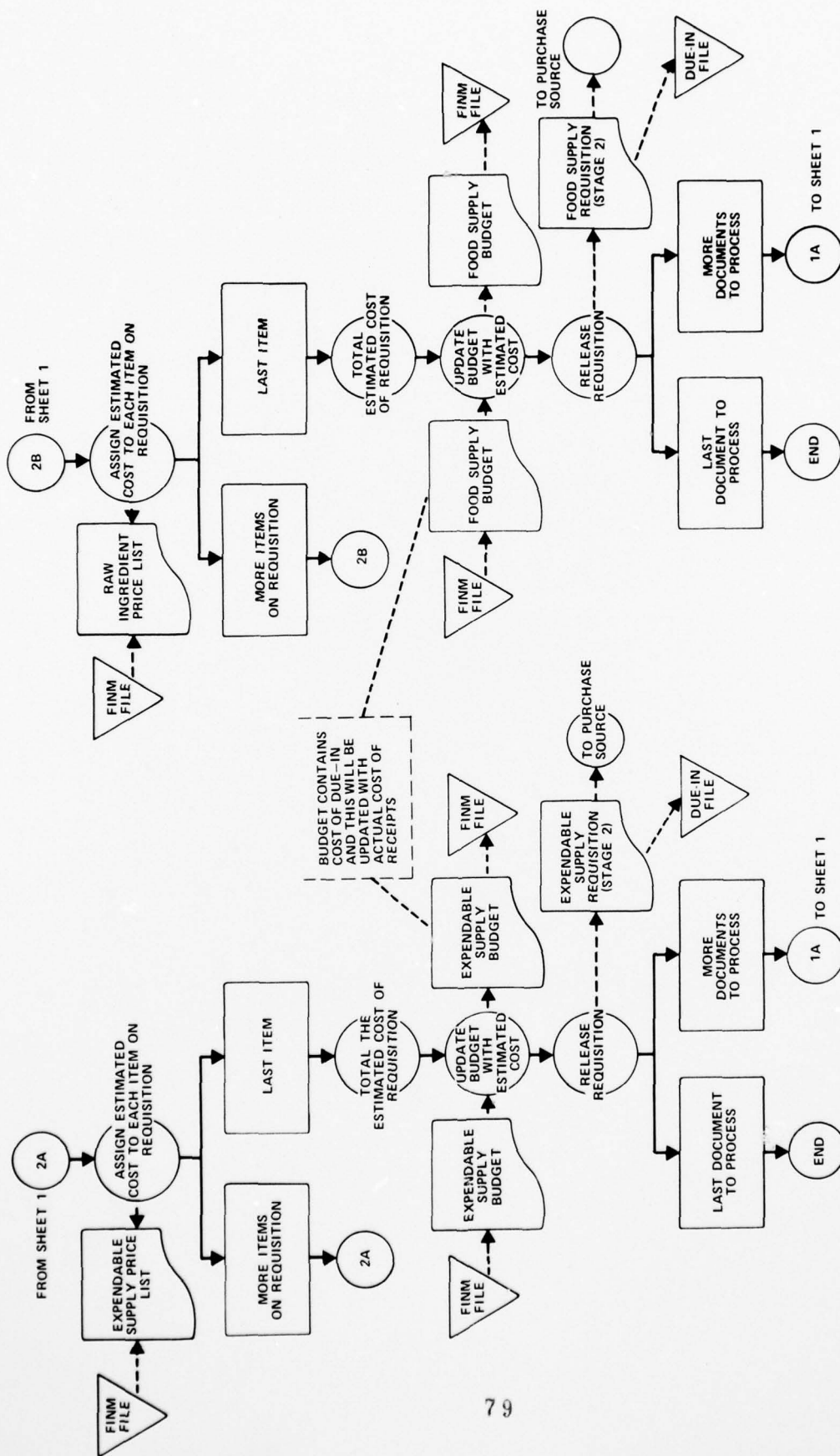


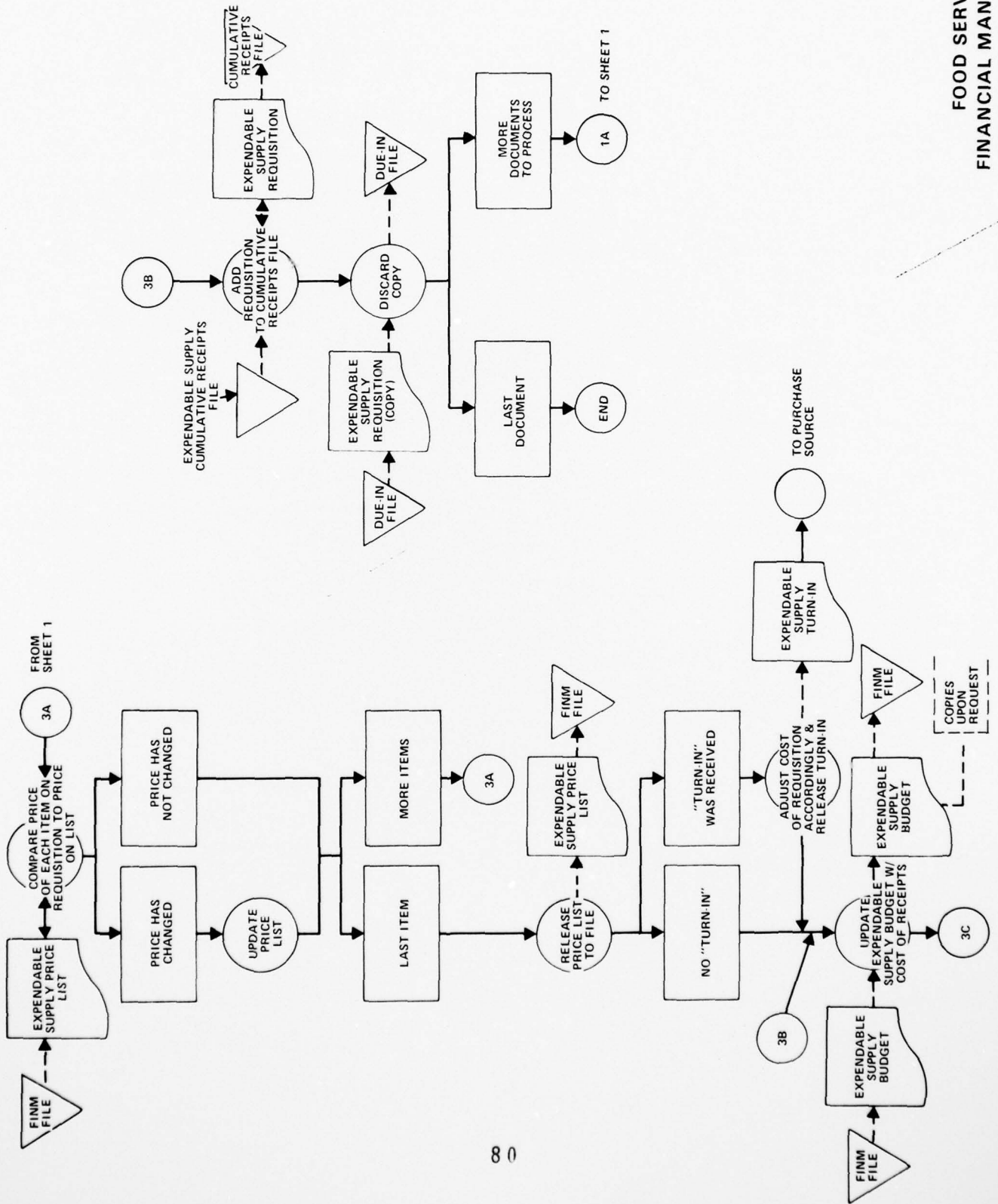


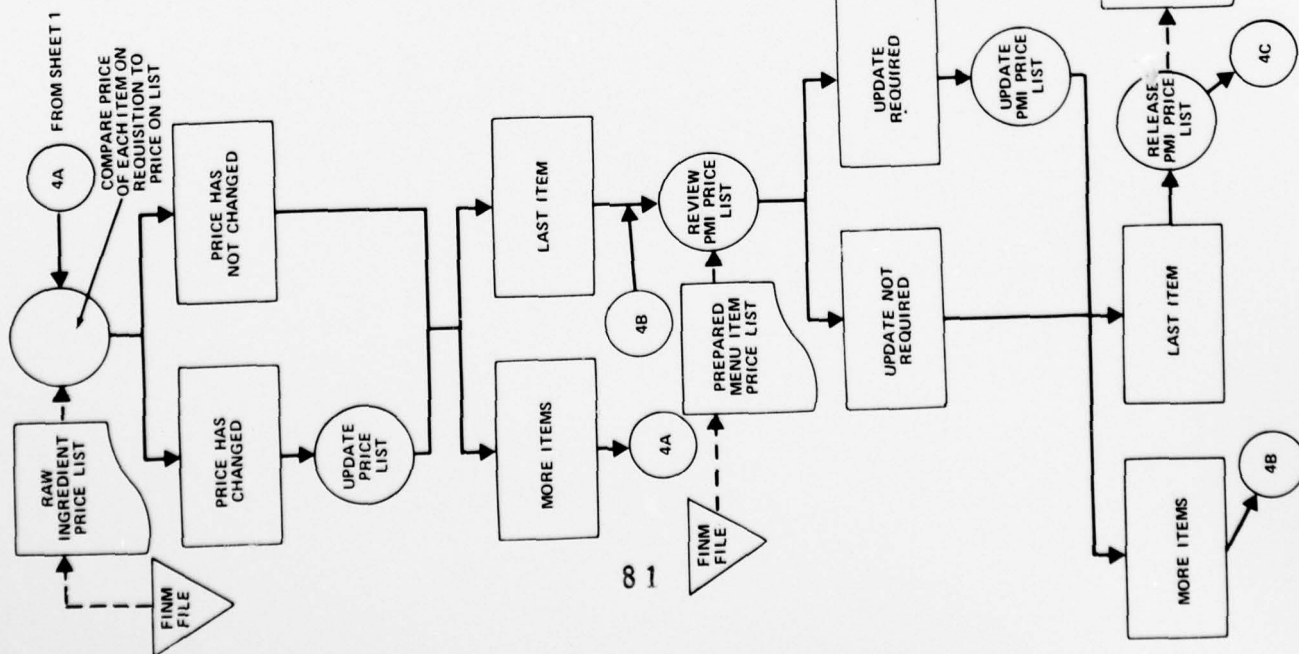
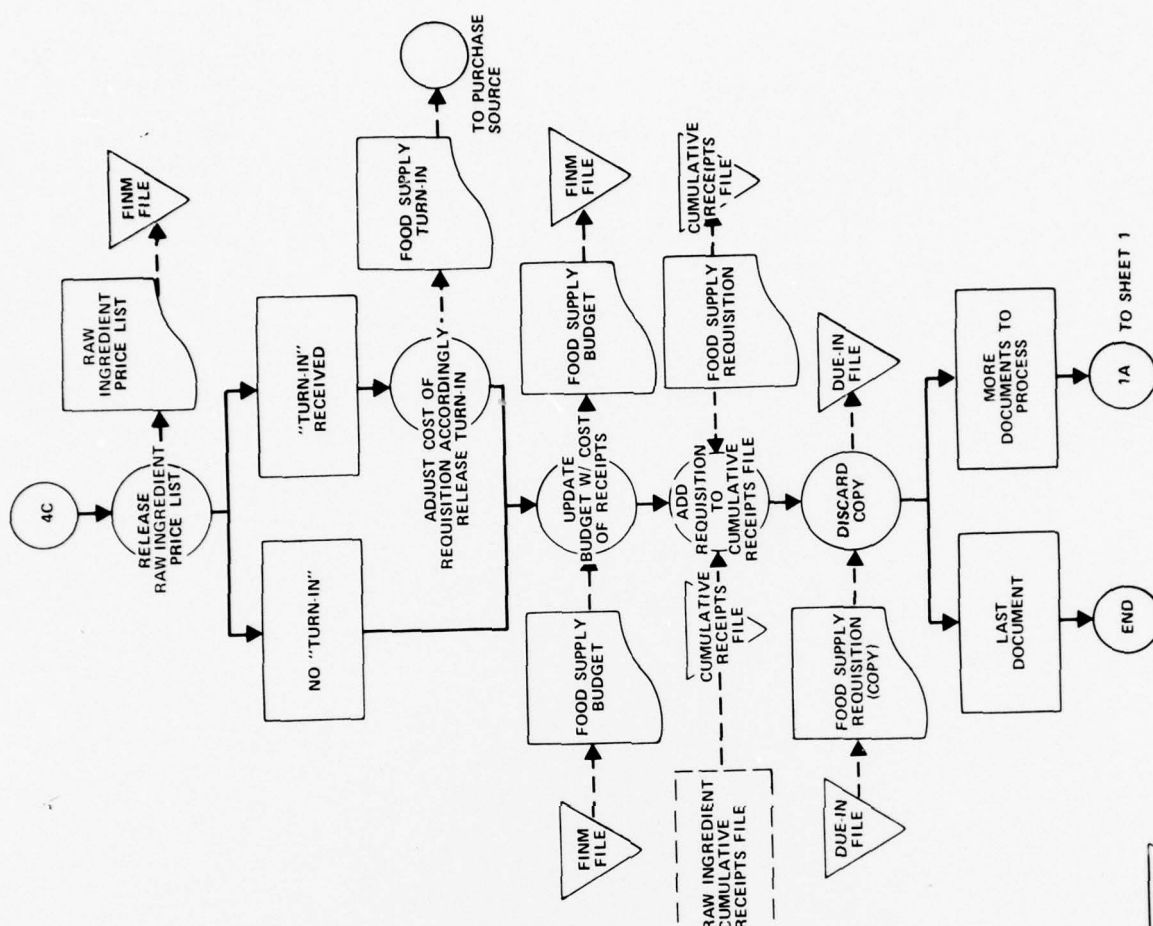


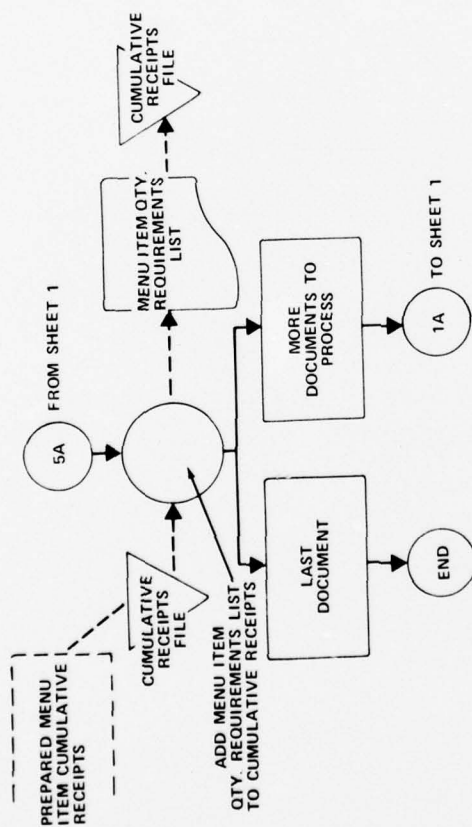




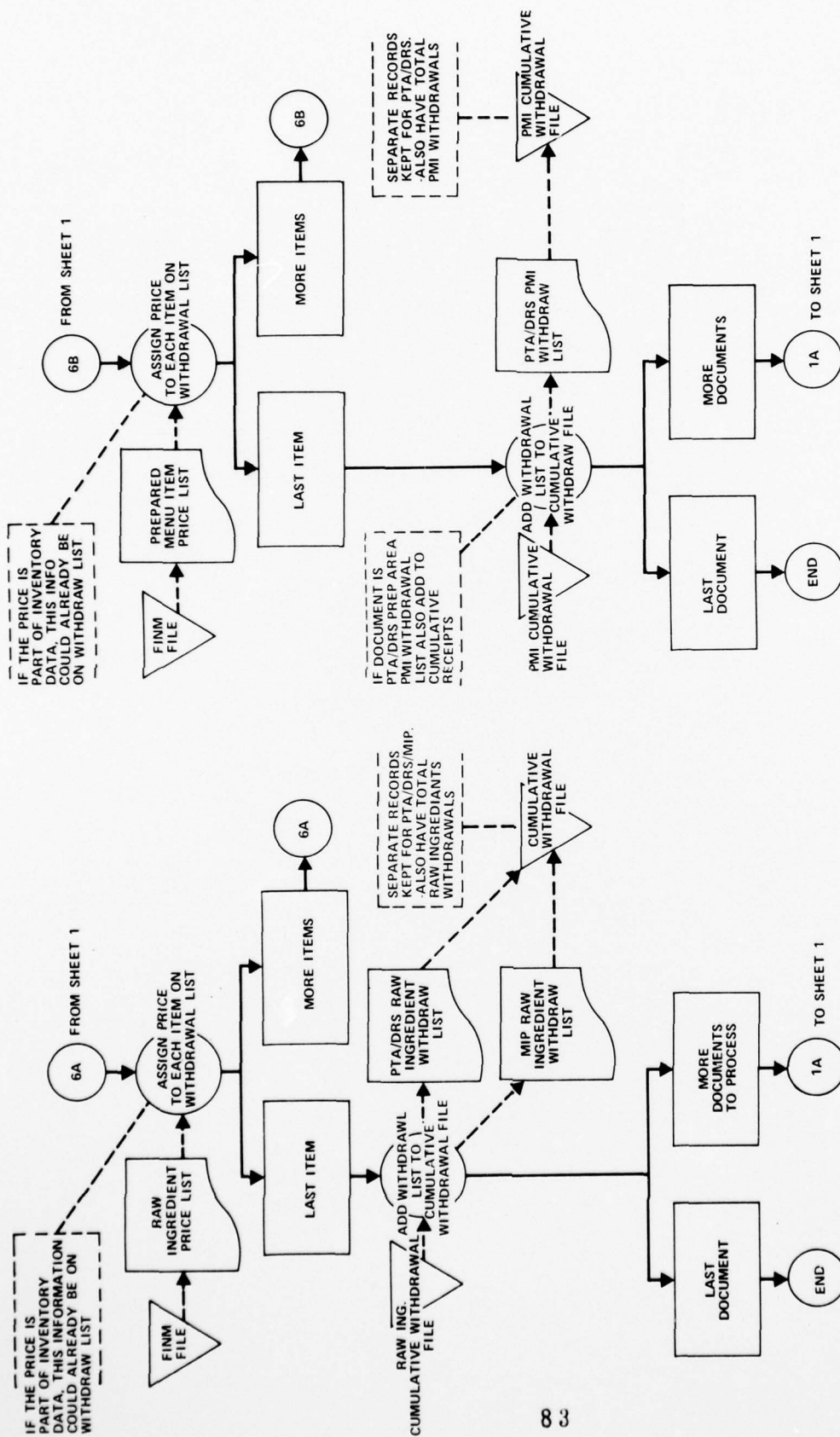


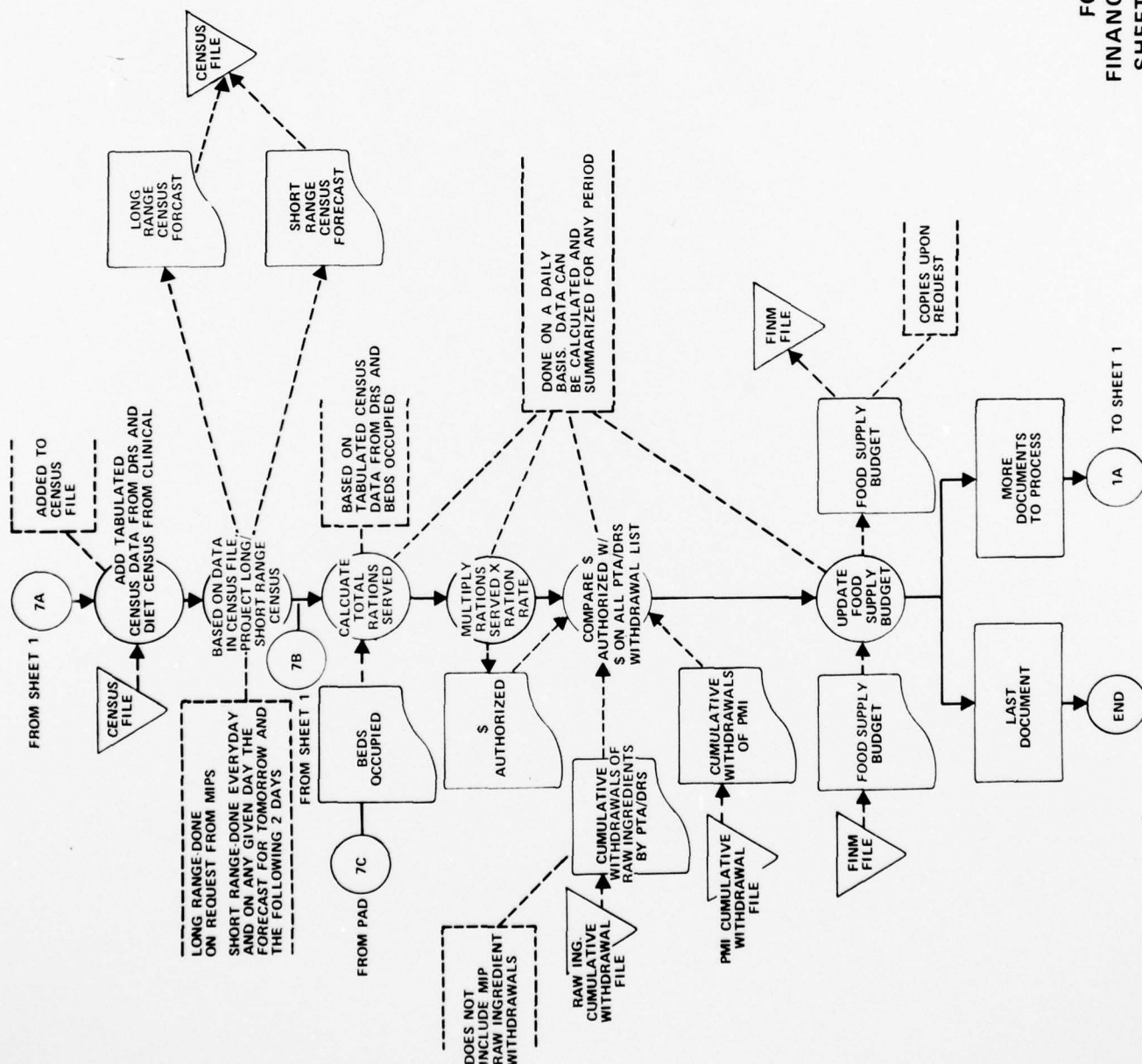


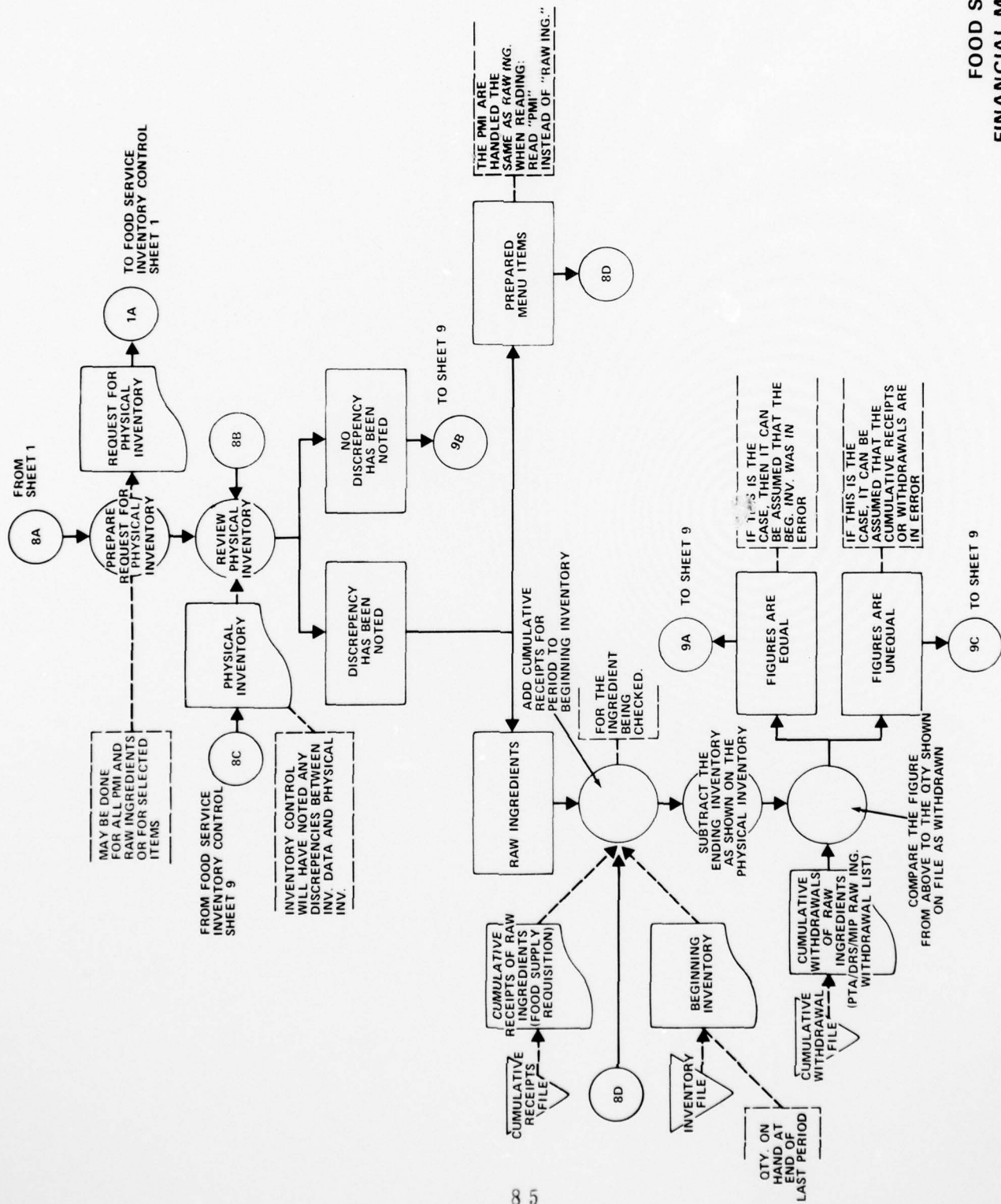


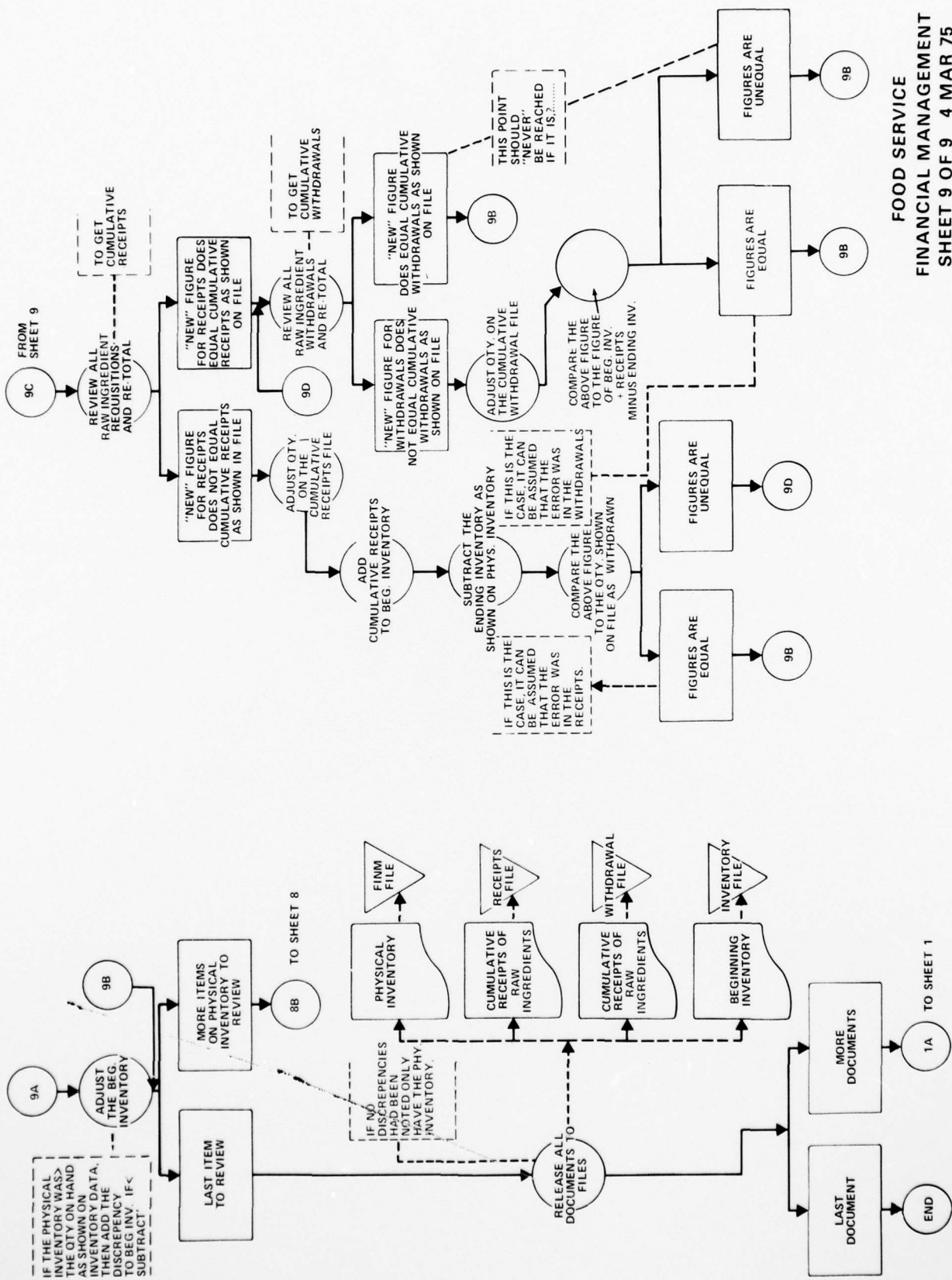


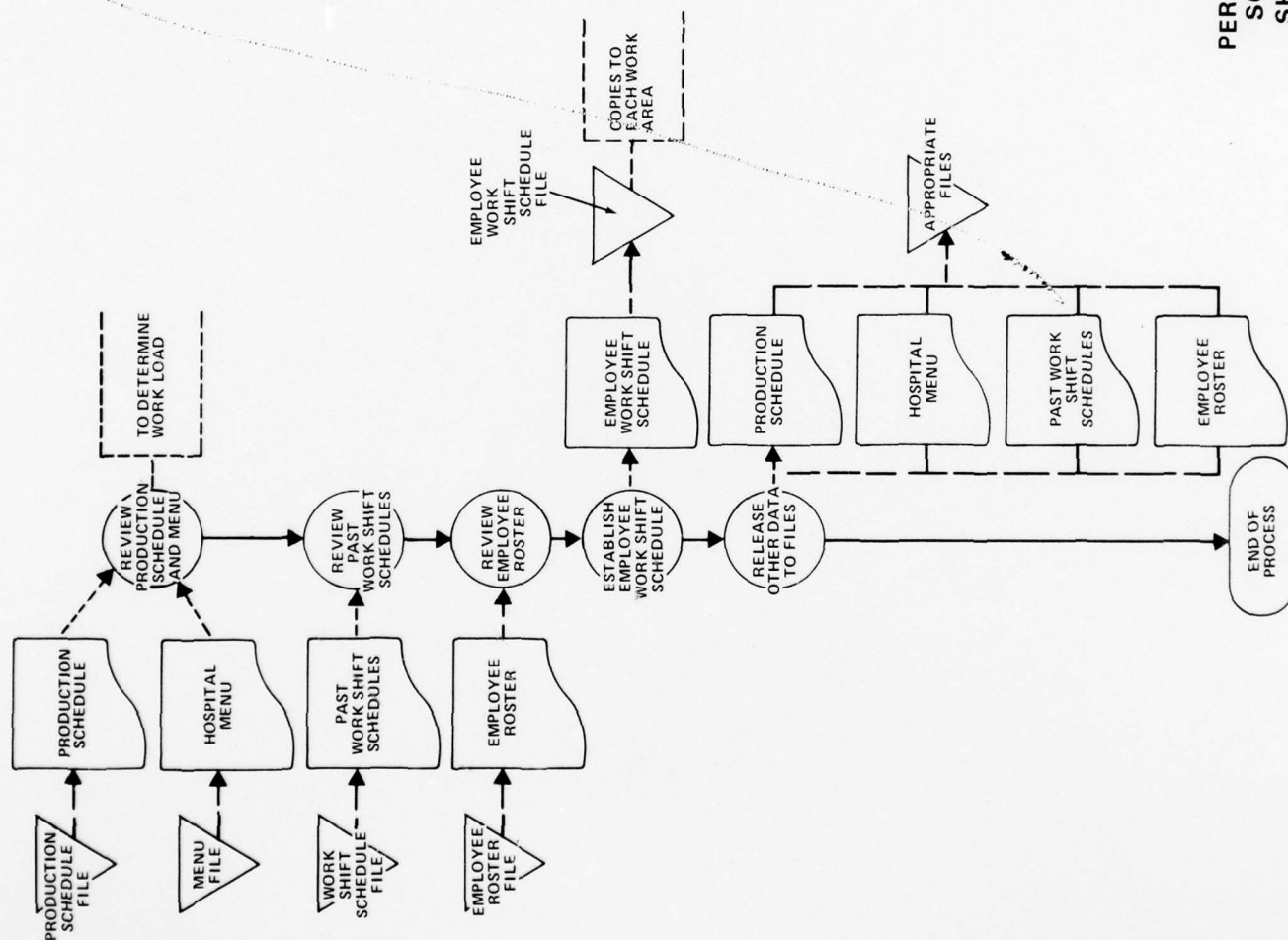
FOOD SERVICE
FINANCIAL MANAGEMENT
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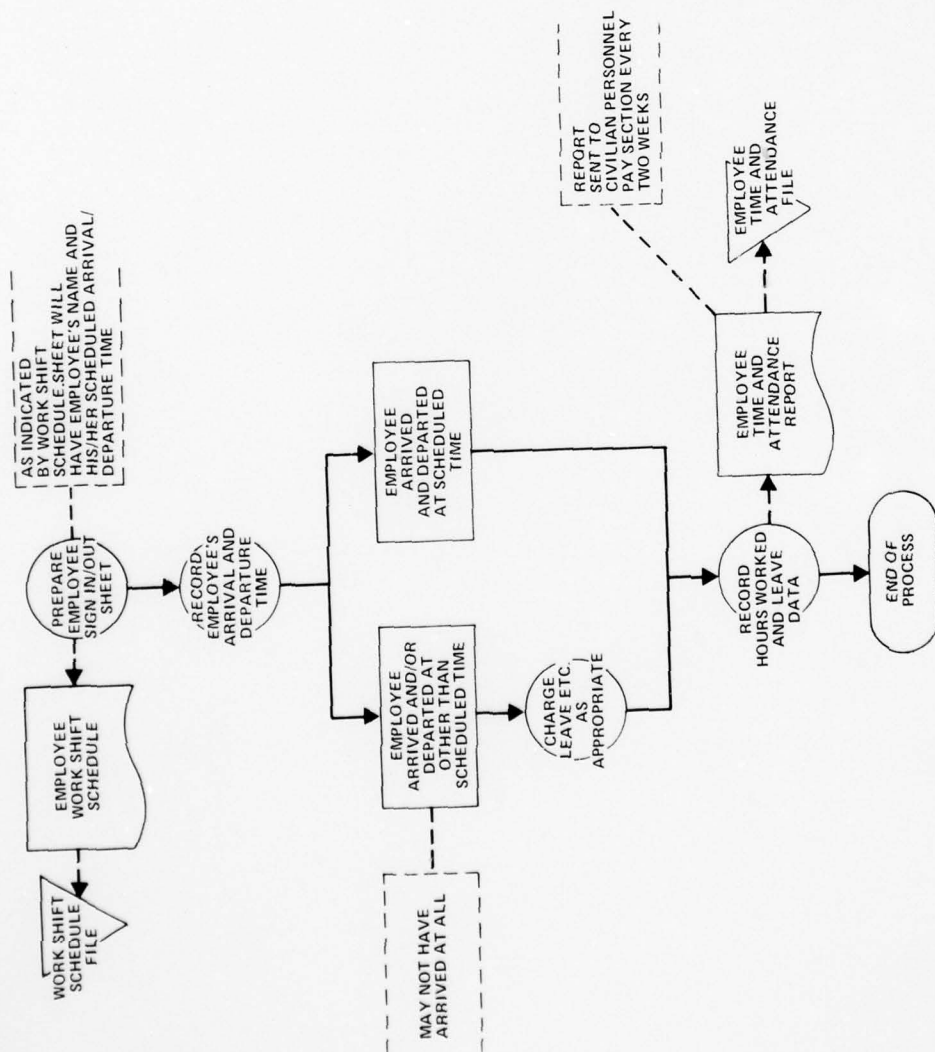








FOOD SERVICE
PERSONNEL MANAGEMENT
SCHEDULING PROCESS
SHEET 1 OF 1 8 DEC 75



FOOD SERVICE
PERSONNEL MANAGEMENT
EMPLOYEE SIGN IN/OUT PROCESS
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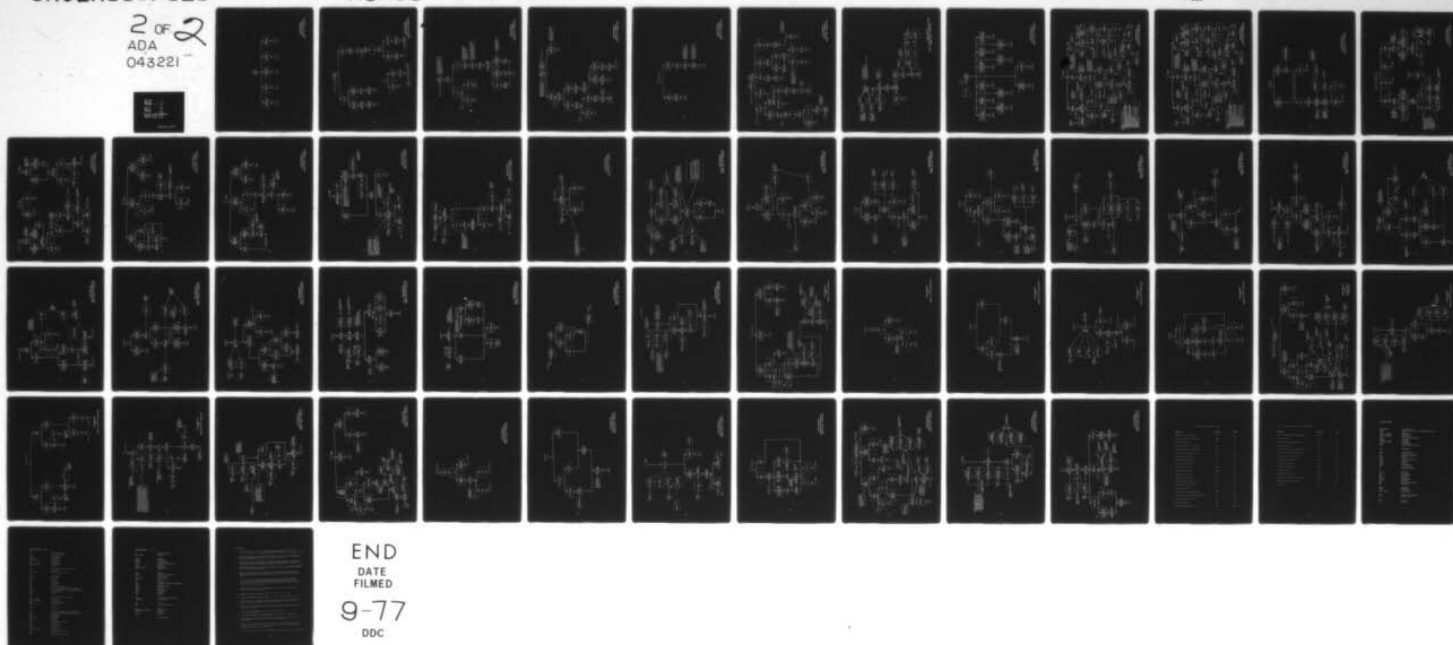
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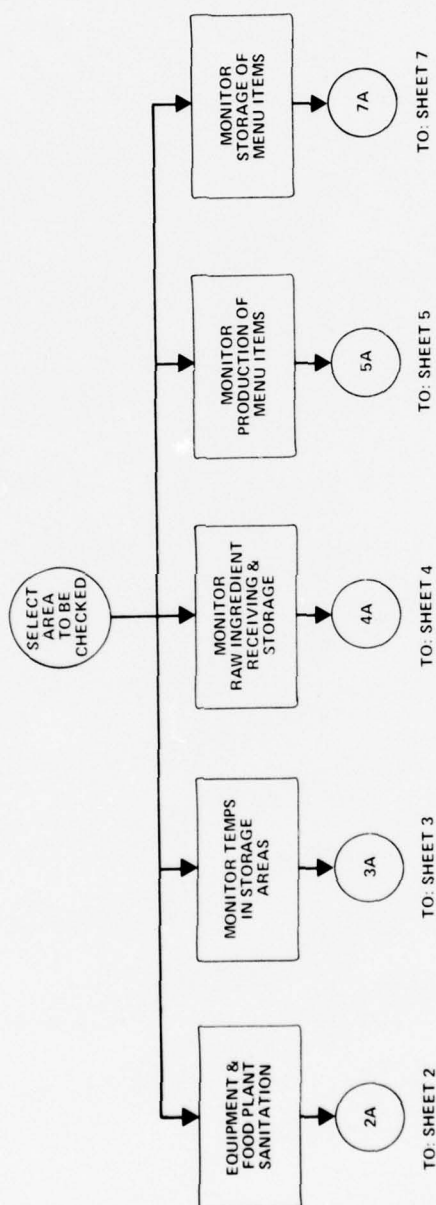
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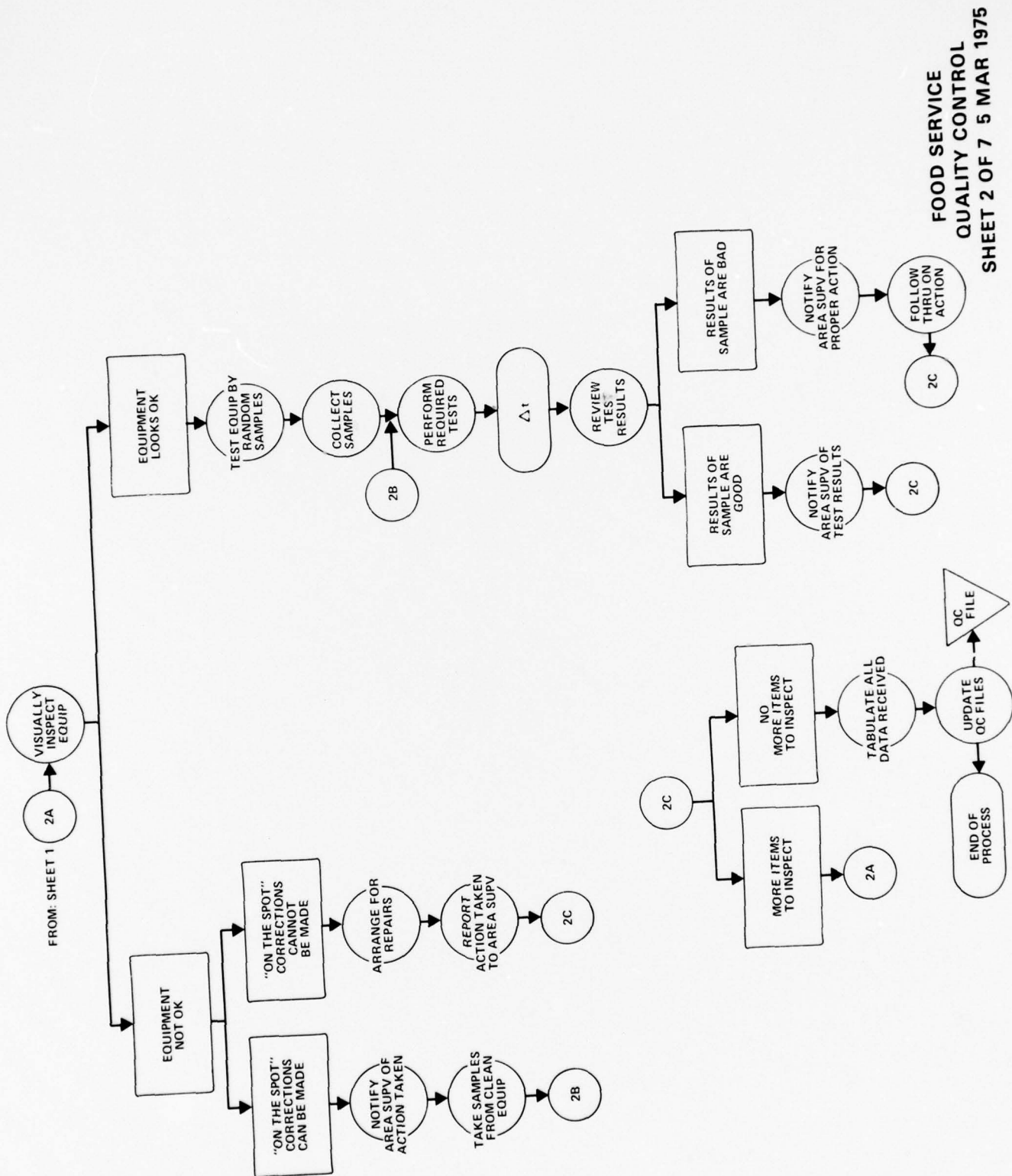
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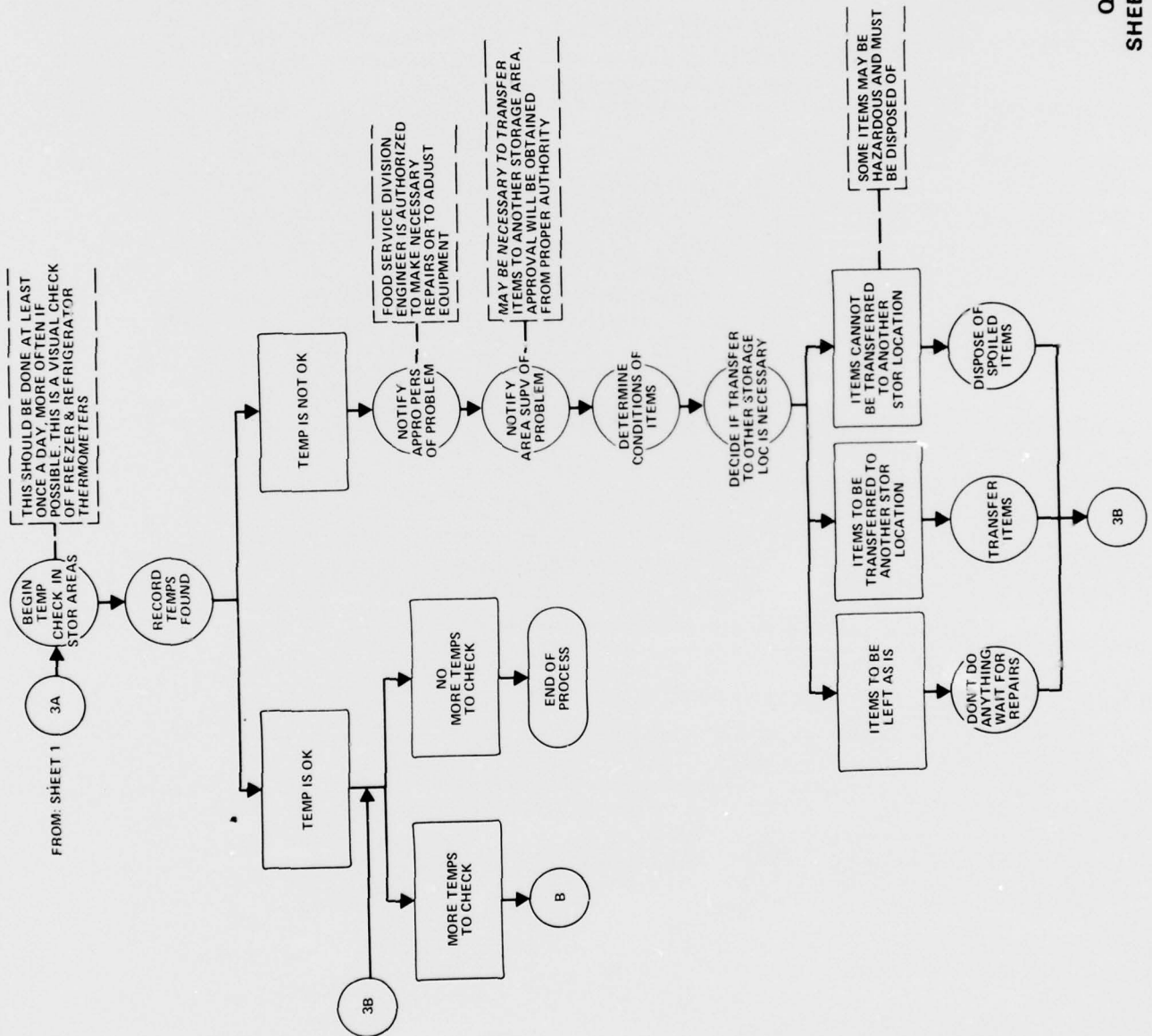
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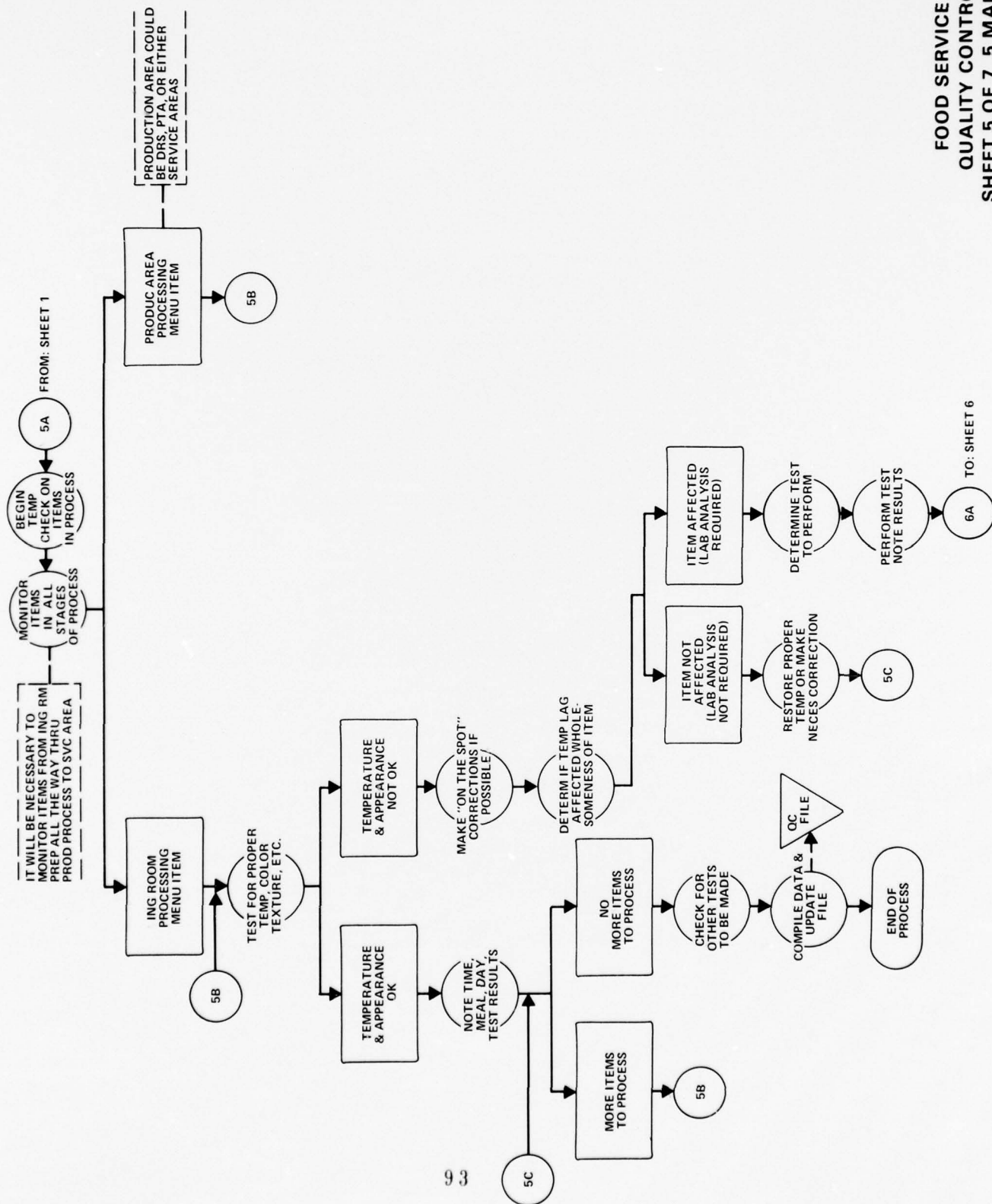


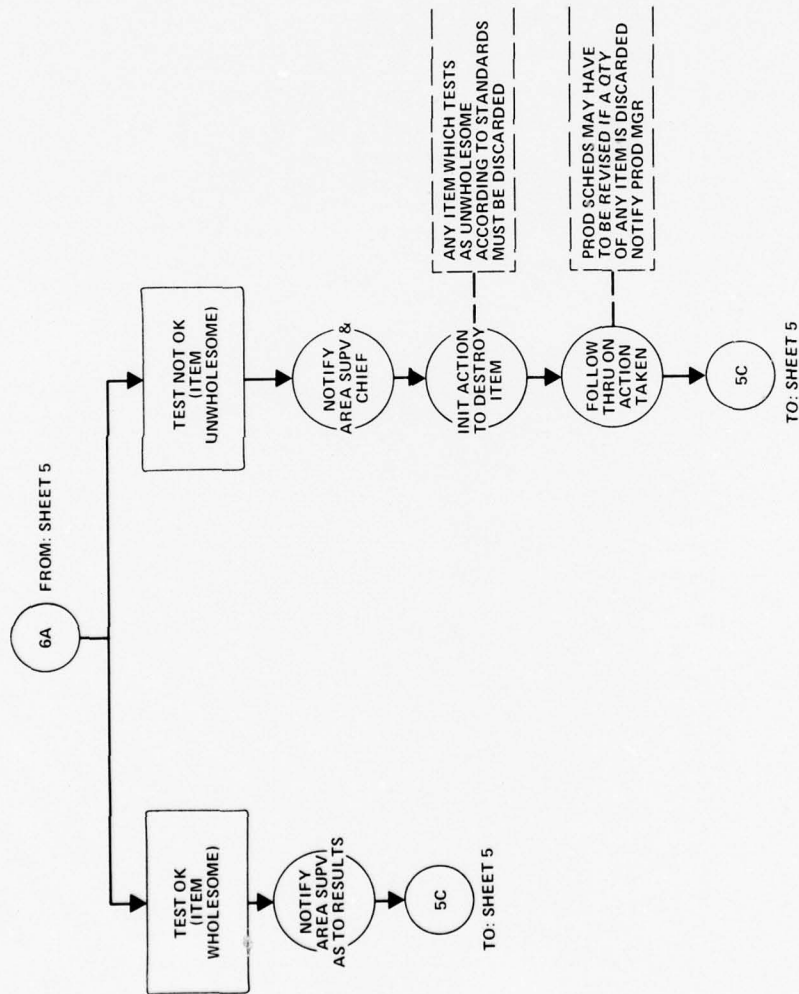


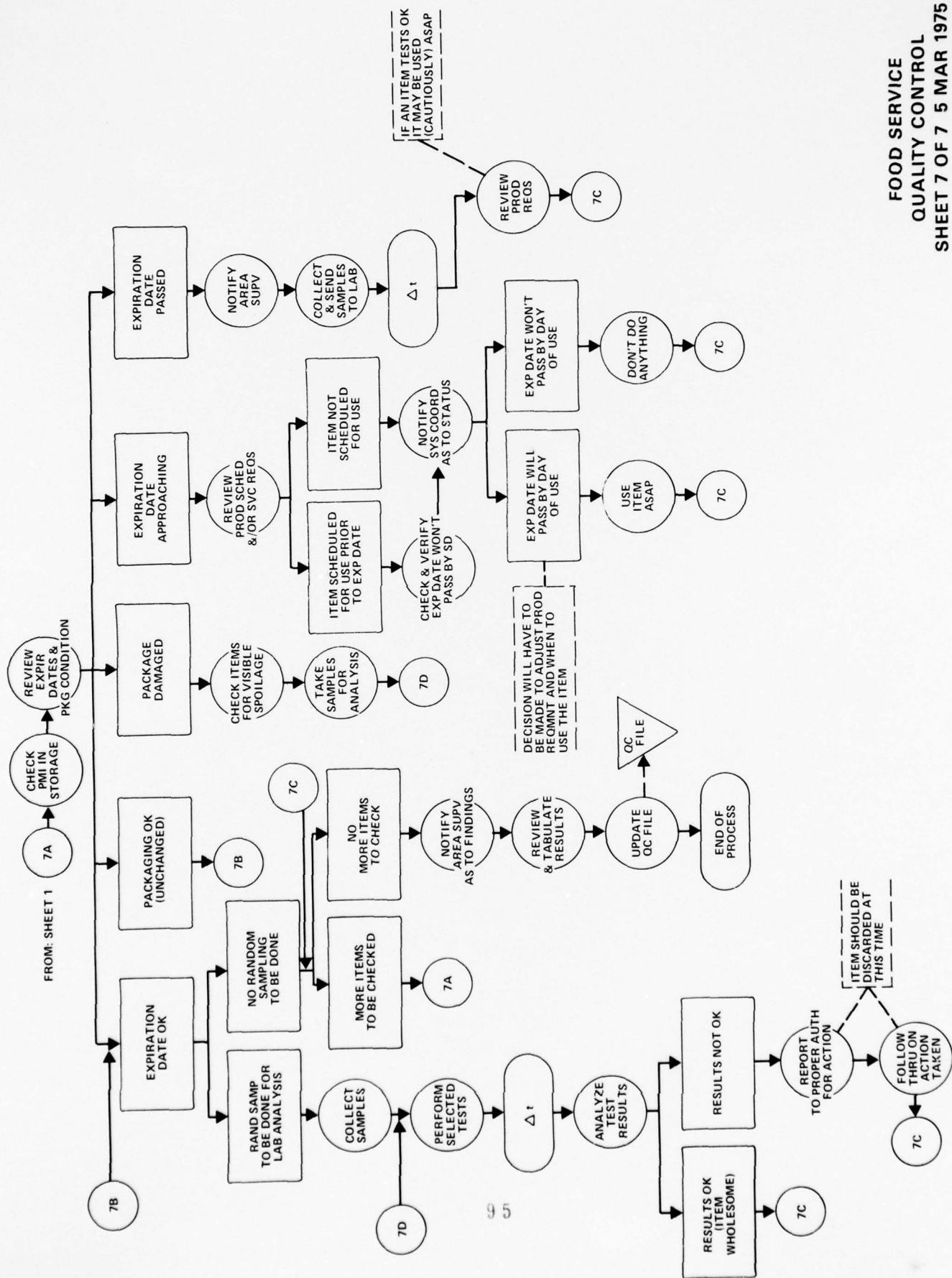


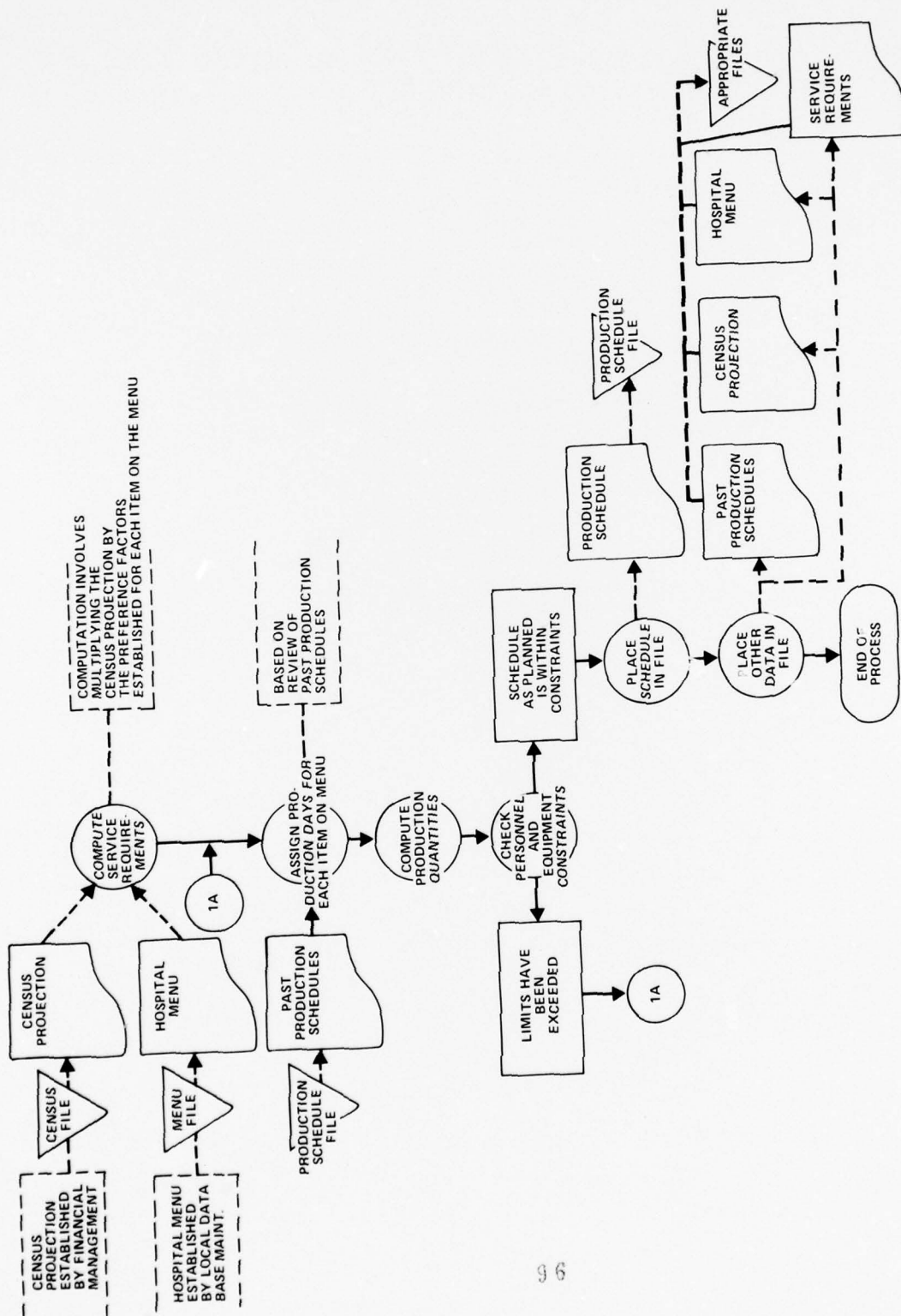
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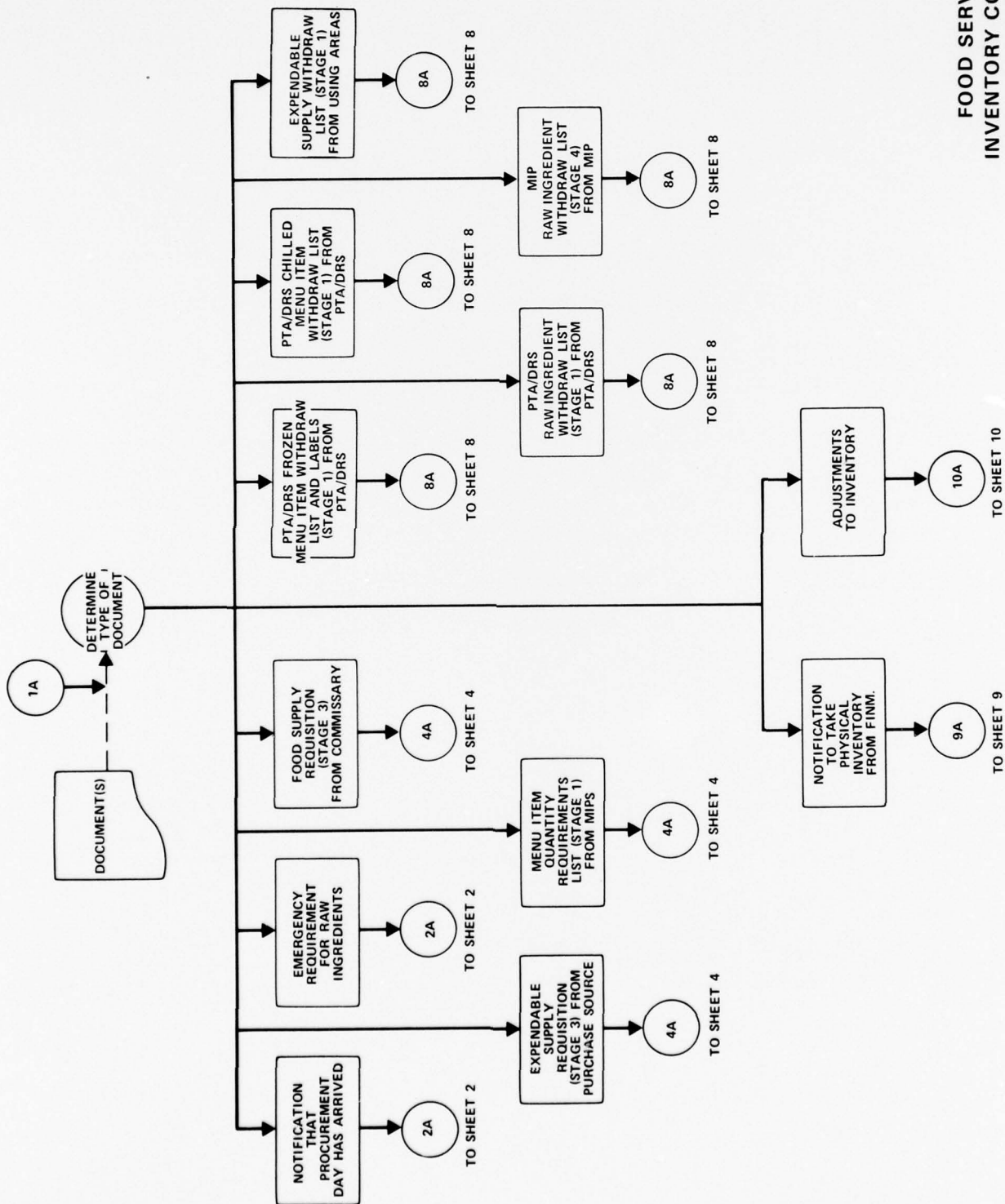


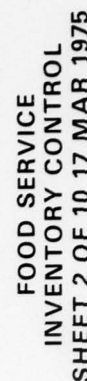




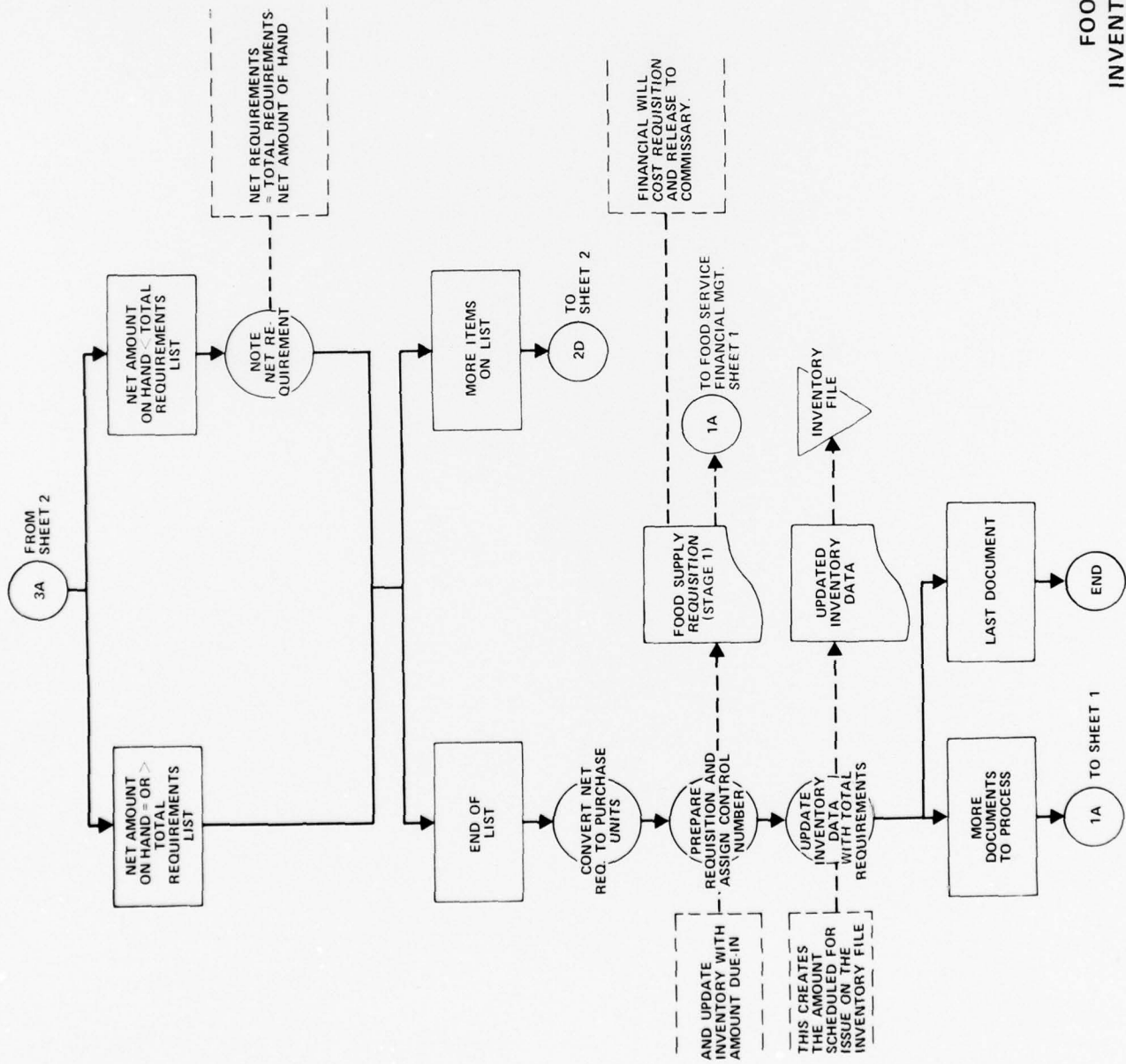


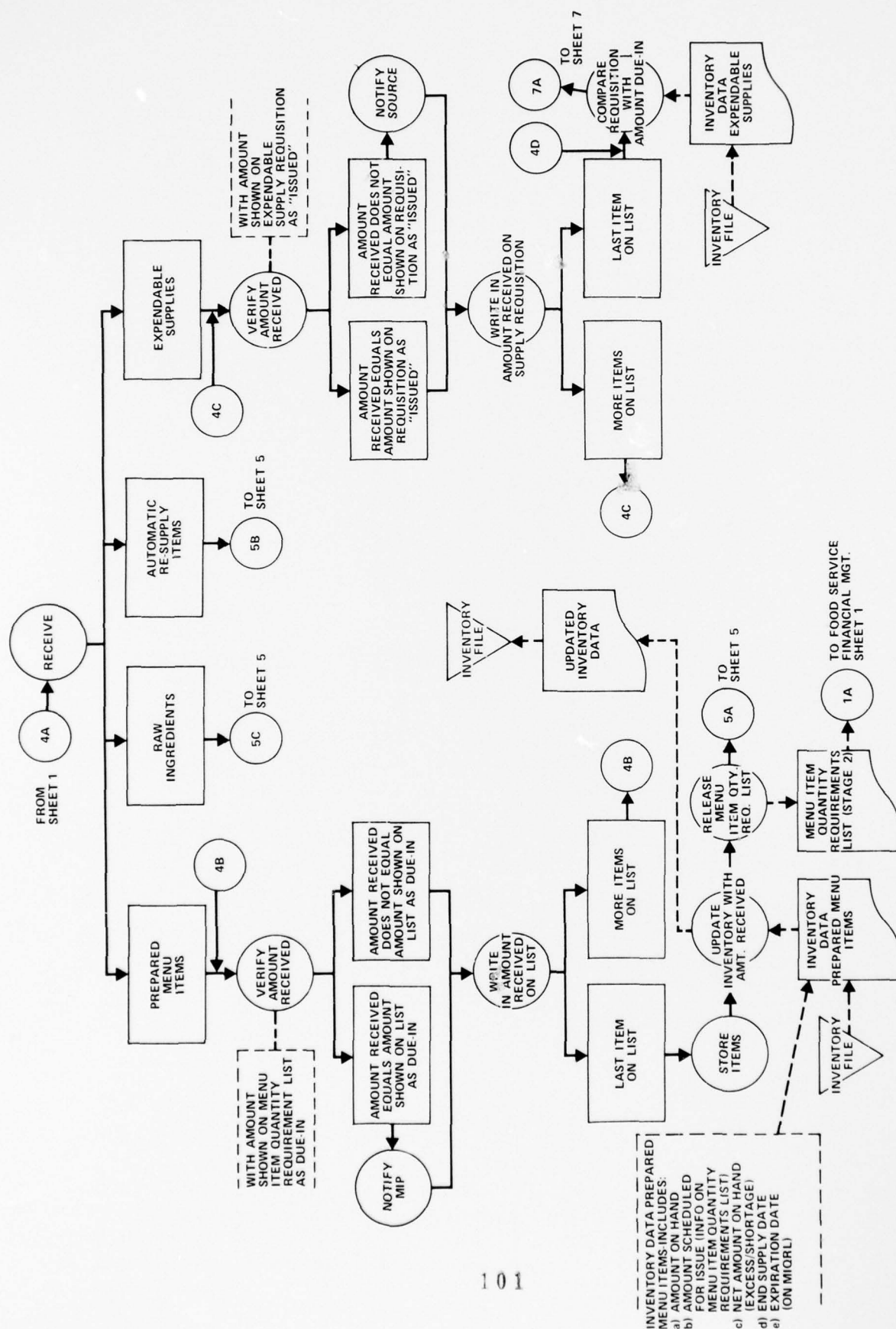


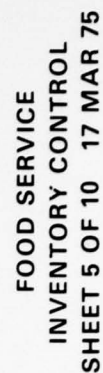


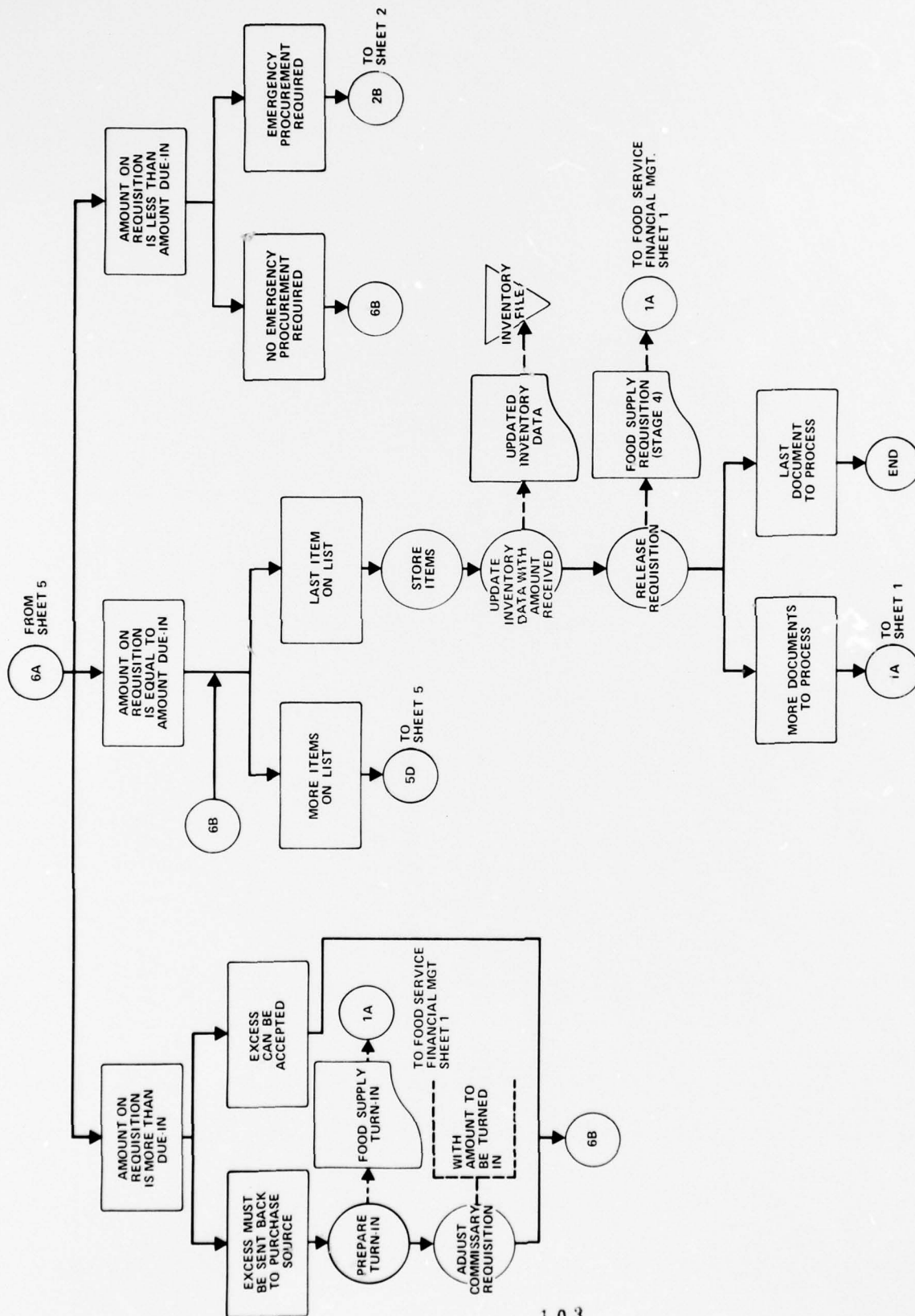


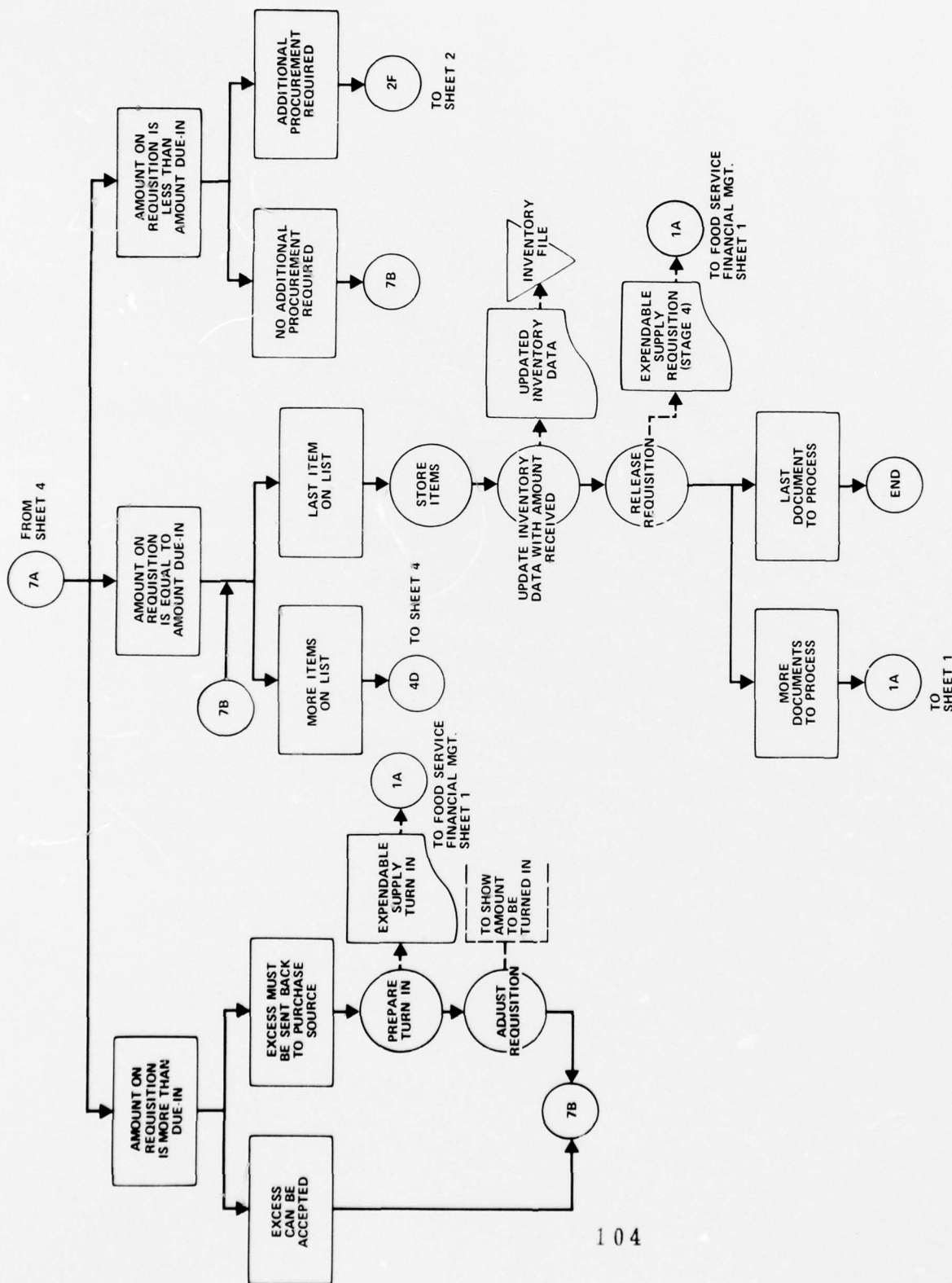
- c) amount of each ingredient on hand
- d) amount due in (outstanding requisitions)
- e) amount scheduled for issue on those production days covered by previous procurement period
- f) amount of each ingredient available for issue on production days covered by present procurement period (net amount on hand)
- g) amount on hand + due in due for issue * net amount on hand
- h) net amount on hand can be positive or negative and is due to adjusted requirements
- i) end supply date date through which end supplies will last

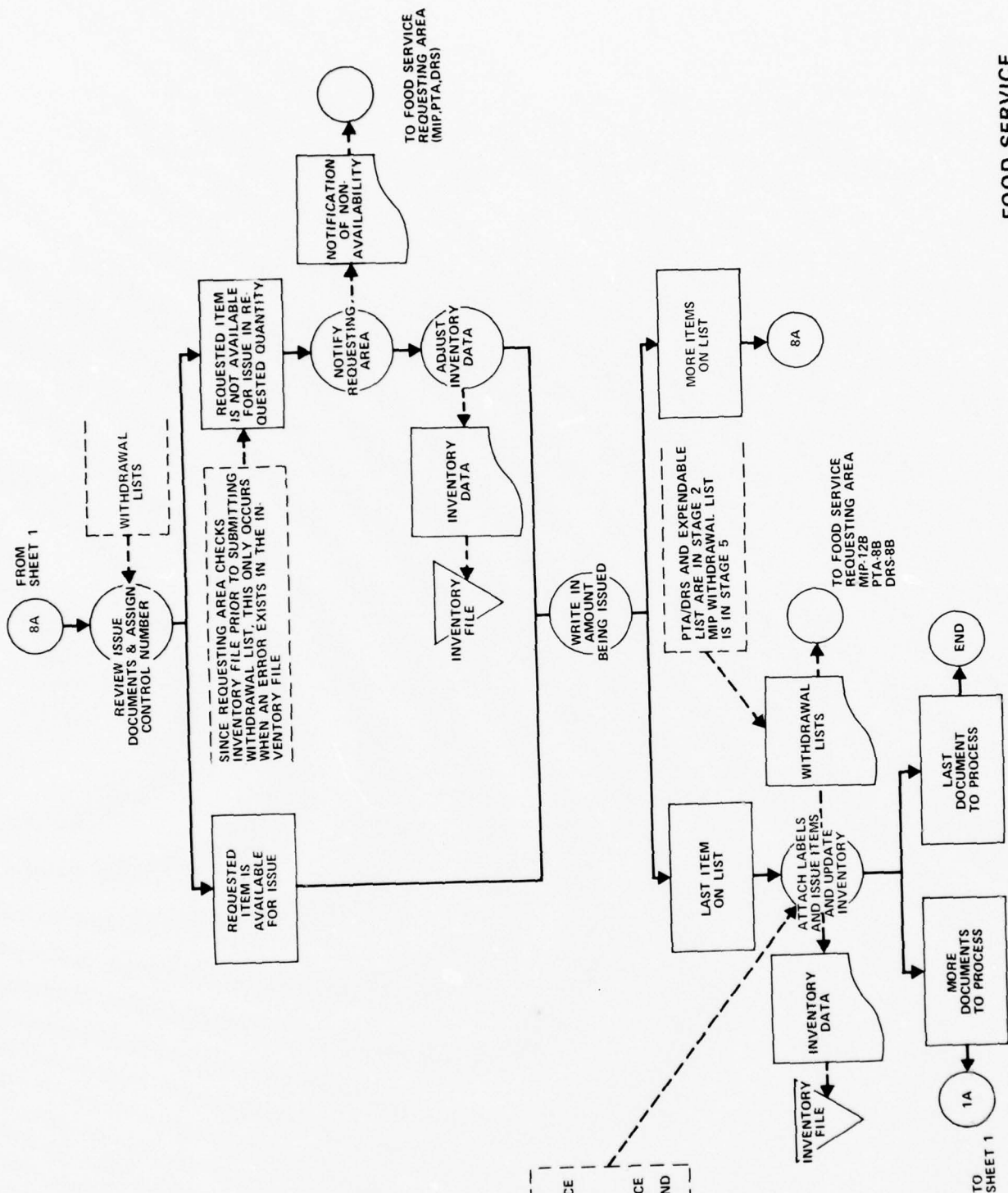






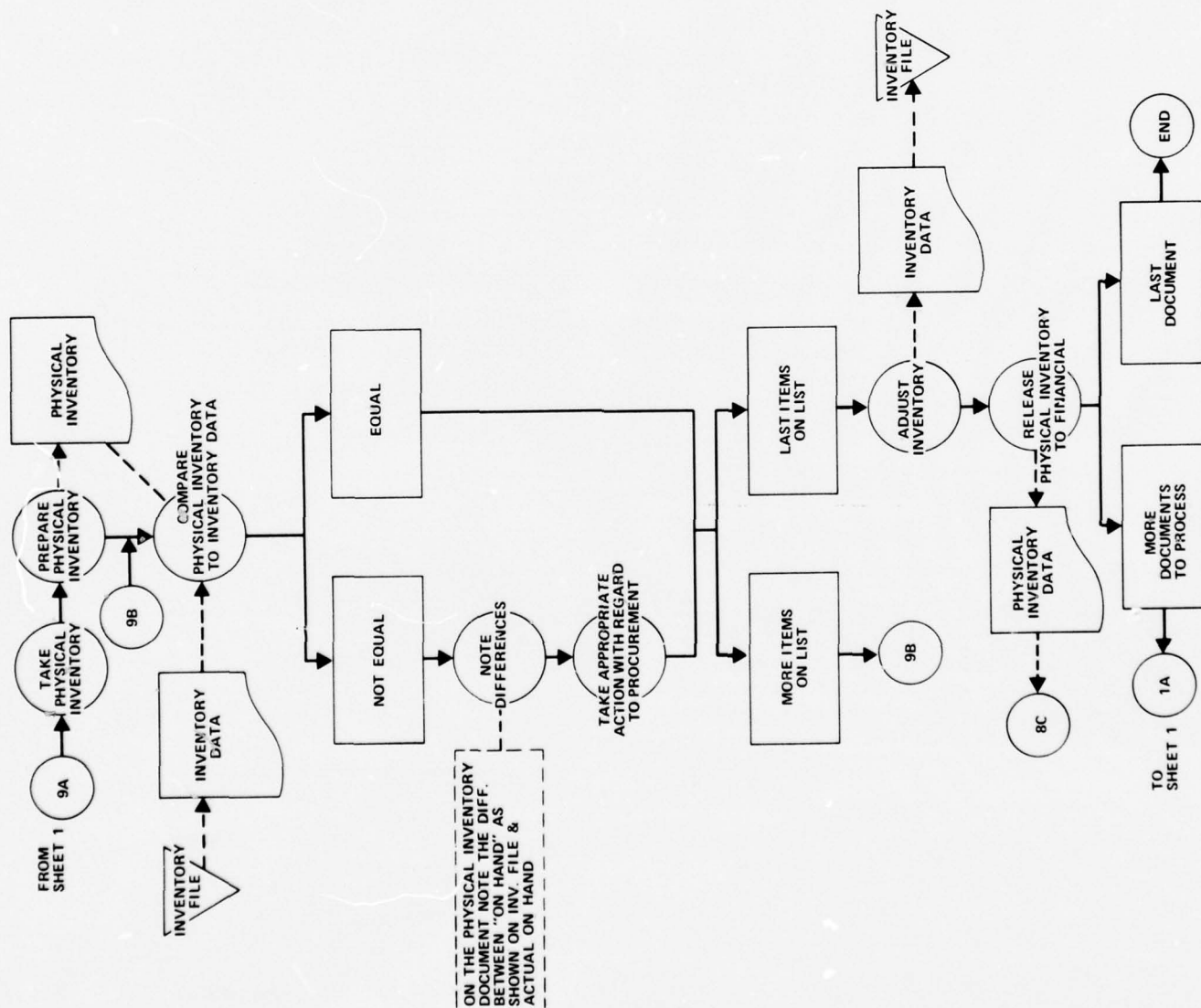


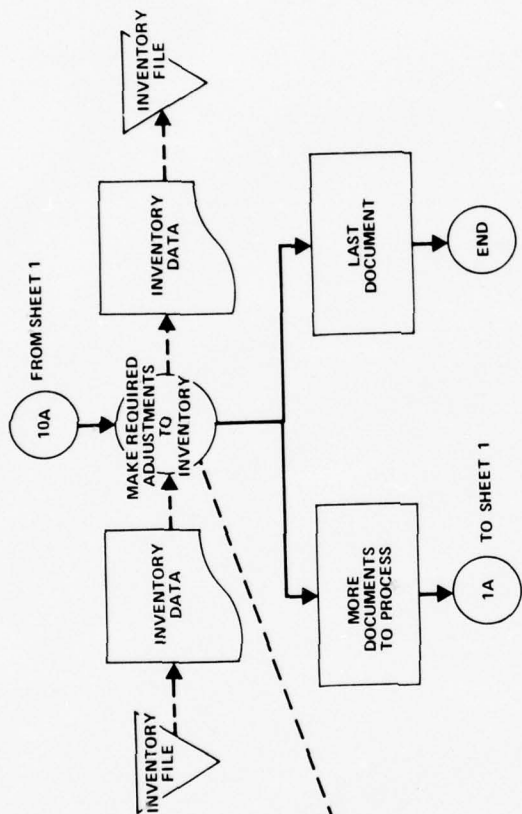




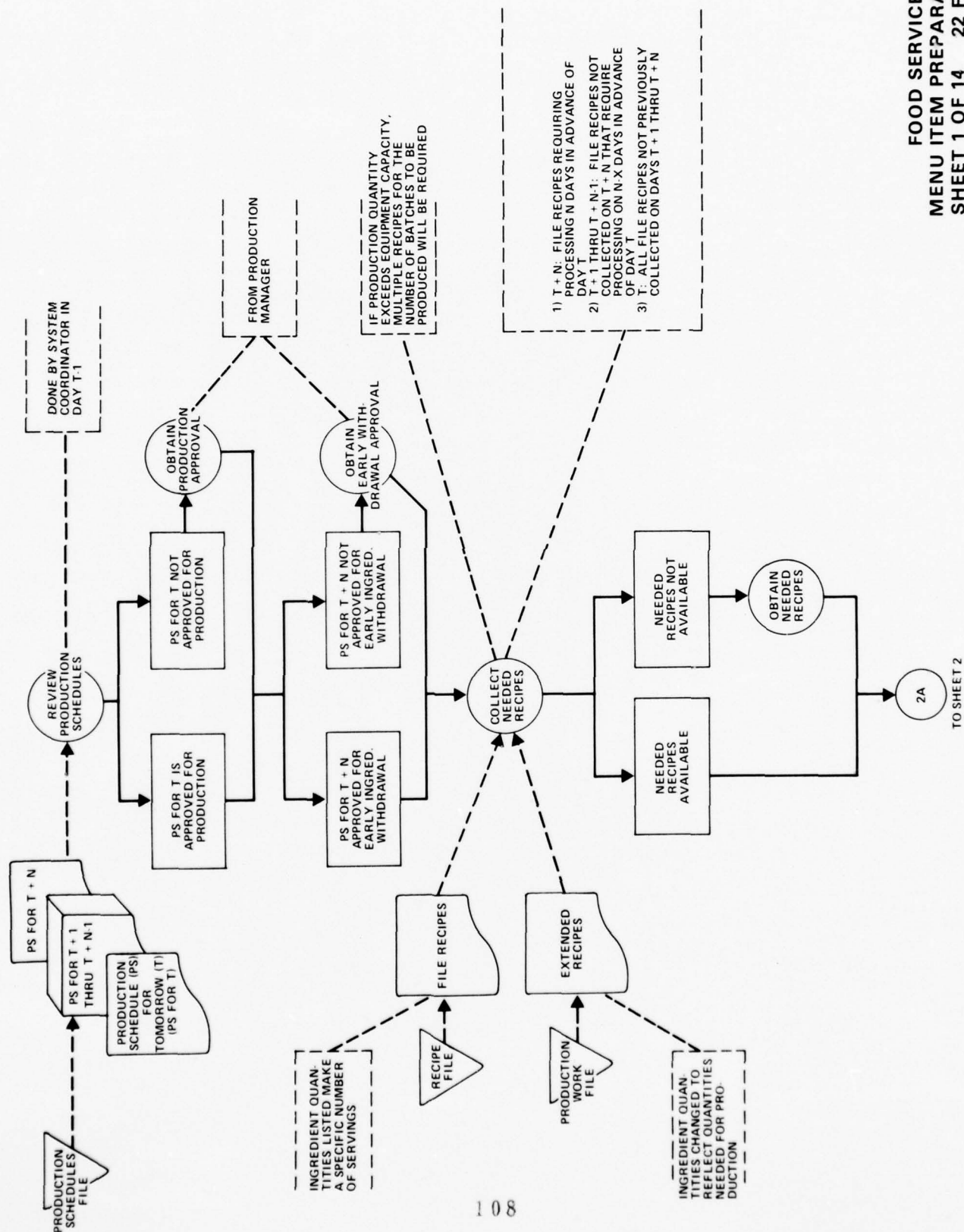
1) IF THE AMOUNT BEING ISSUED IS $<$ THE AMOUNT SCHEDULED FOR ISSUE, THEN THE DIFFERENCE IS ADDED TO "NET AMOUNT ON HAND".

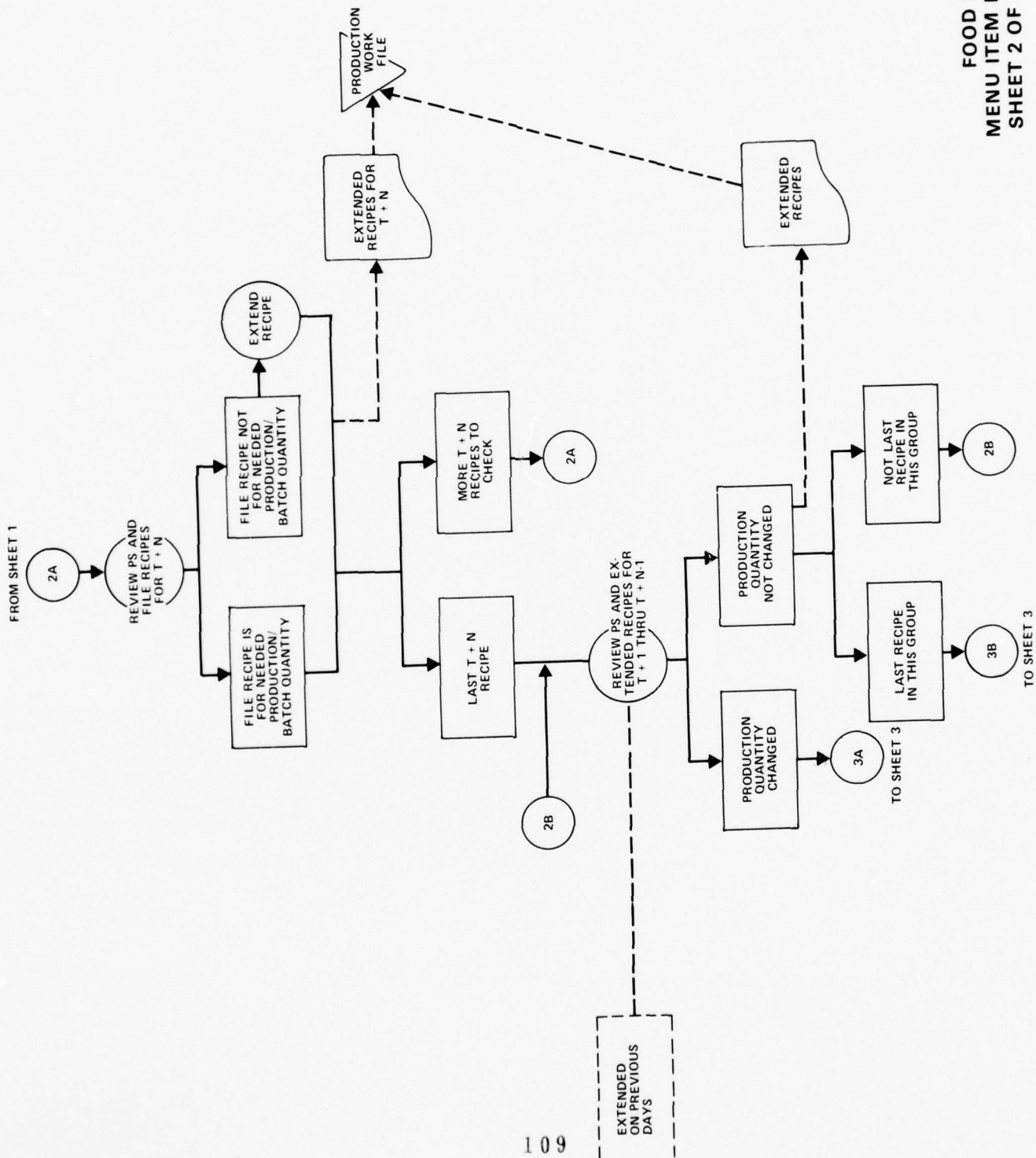
2) IF THE AMOUNT BEING ISSUED IS $>$ THE AMOUNT SCHEDULED FOR ISSUE, THEN THE DIFFERENCE IS SUBTRACTED FROM THE "NET AMOUNT ON HAND" AND THE "END SUPPLY DATE" IS UPDATED.

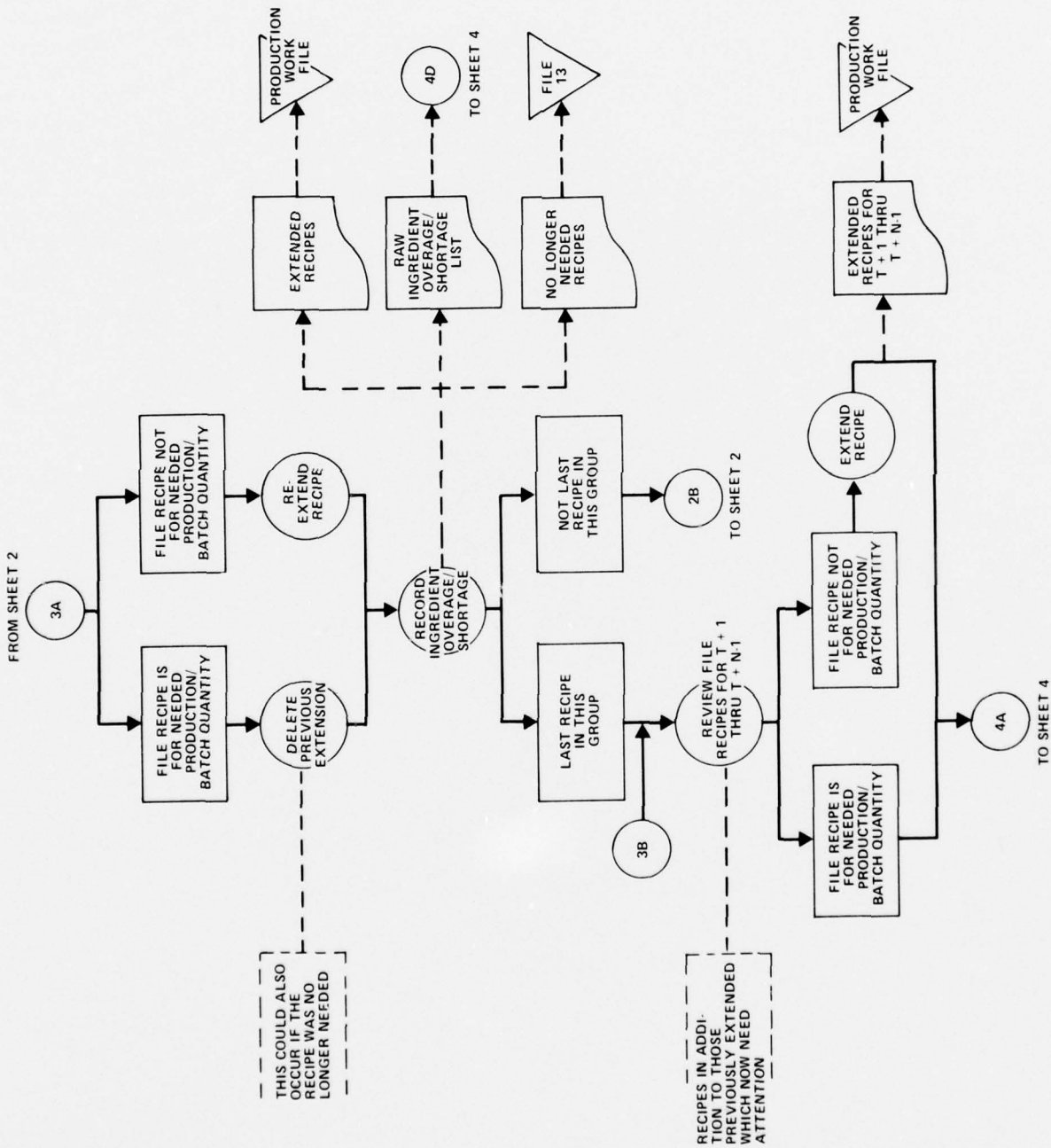


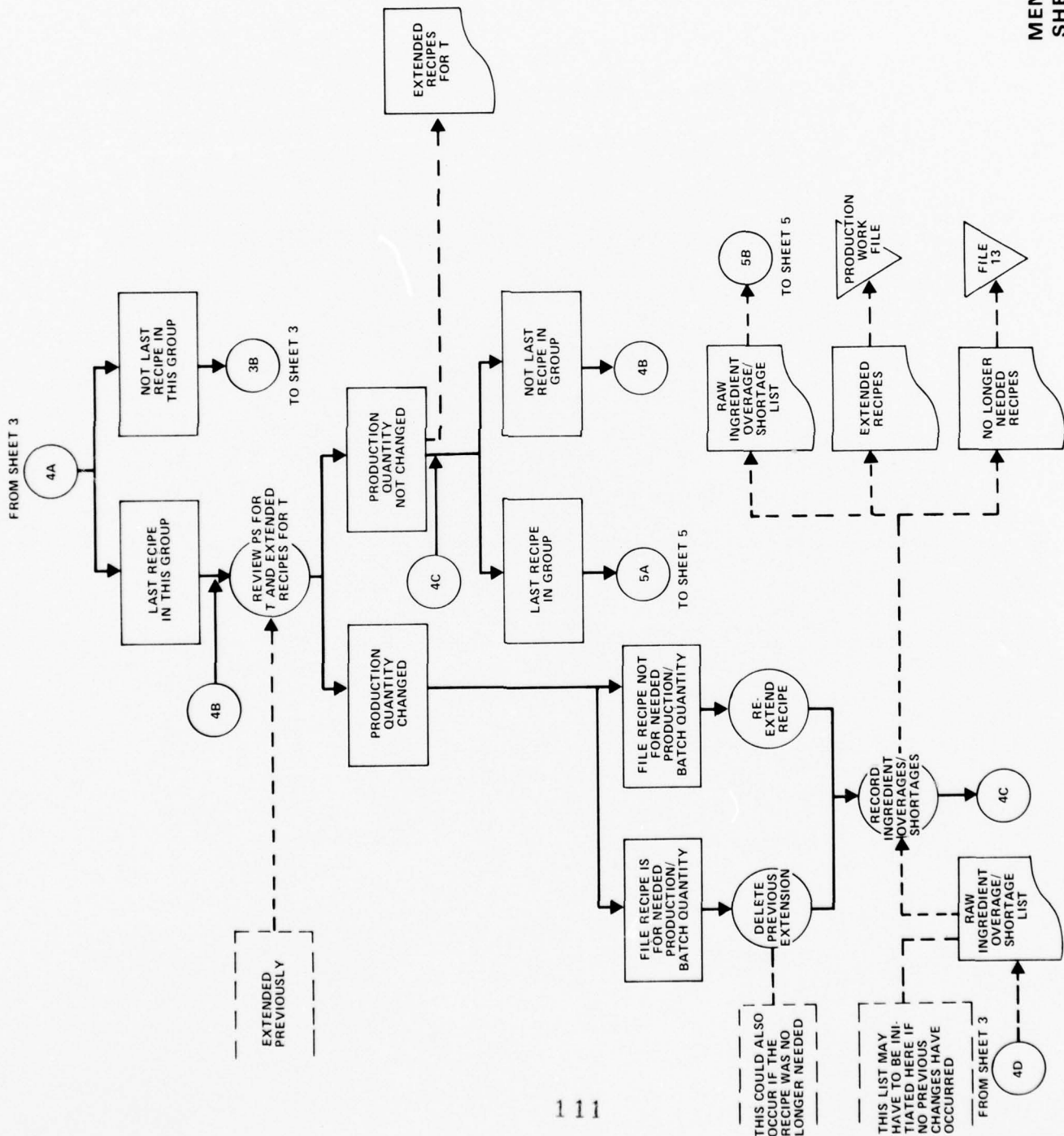


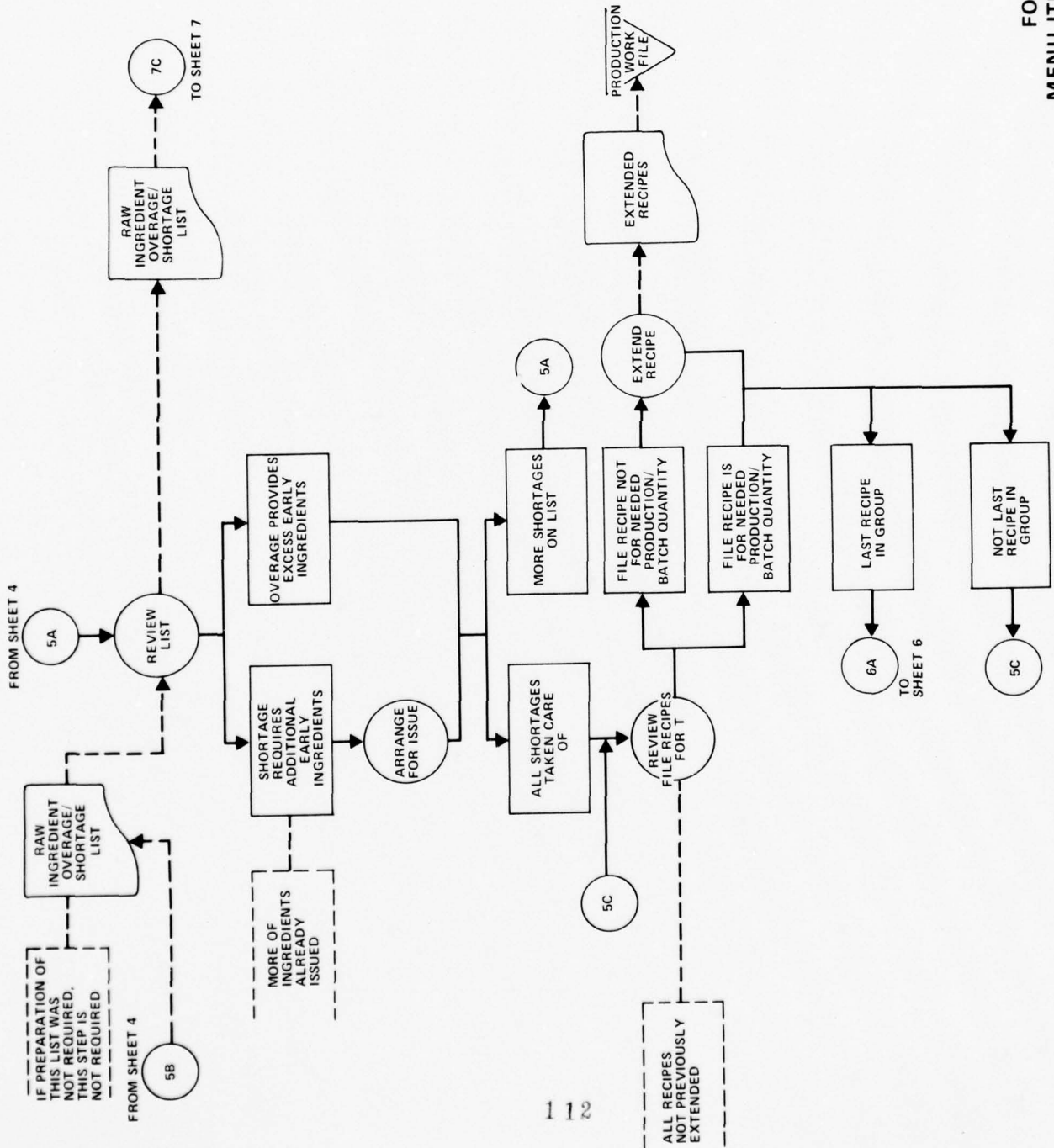
ADJUSTMENTS MAY BE DUE TO:
 1) ERROR FOUND IN INVENTORY DATA
 2) AN ITEM BEING DISCARDED BECAUSE
 OF SPOILAGE

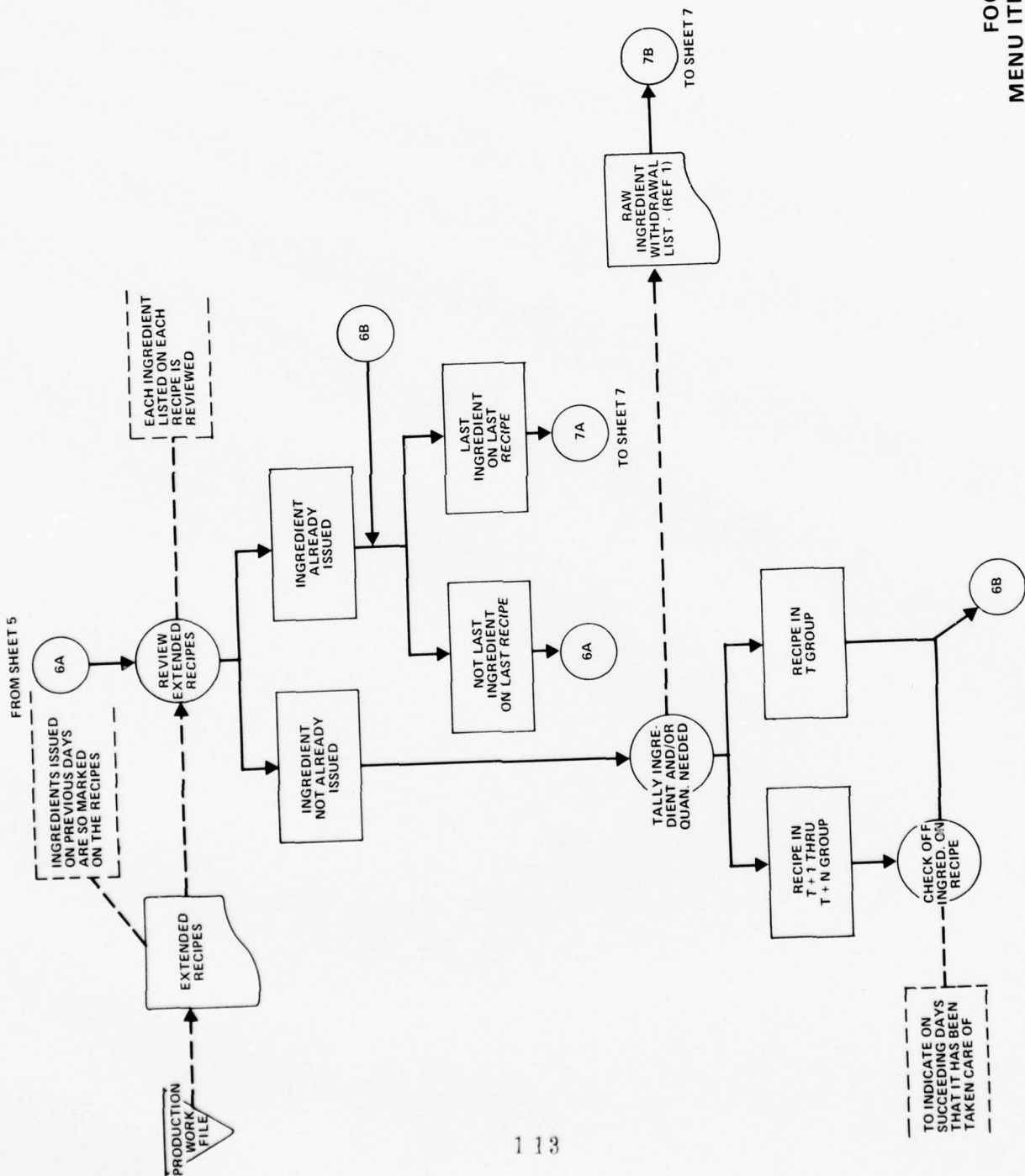


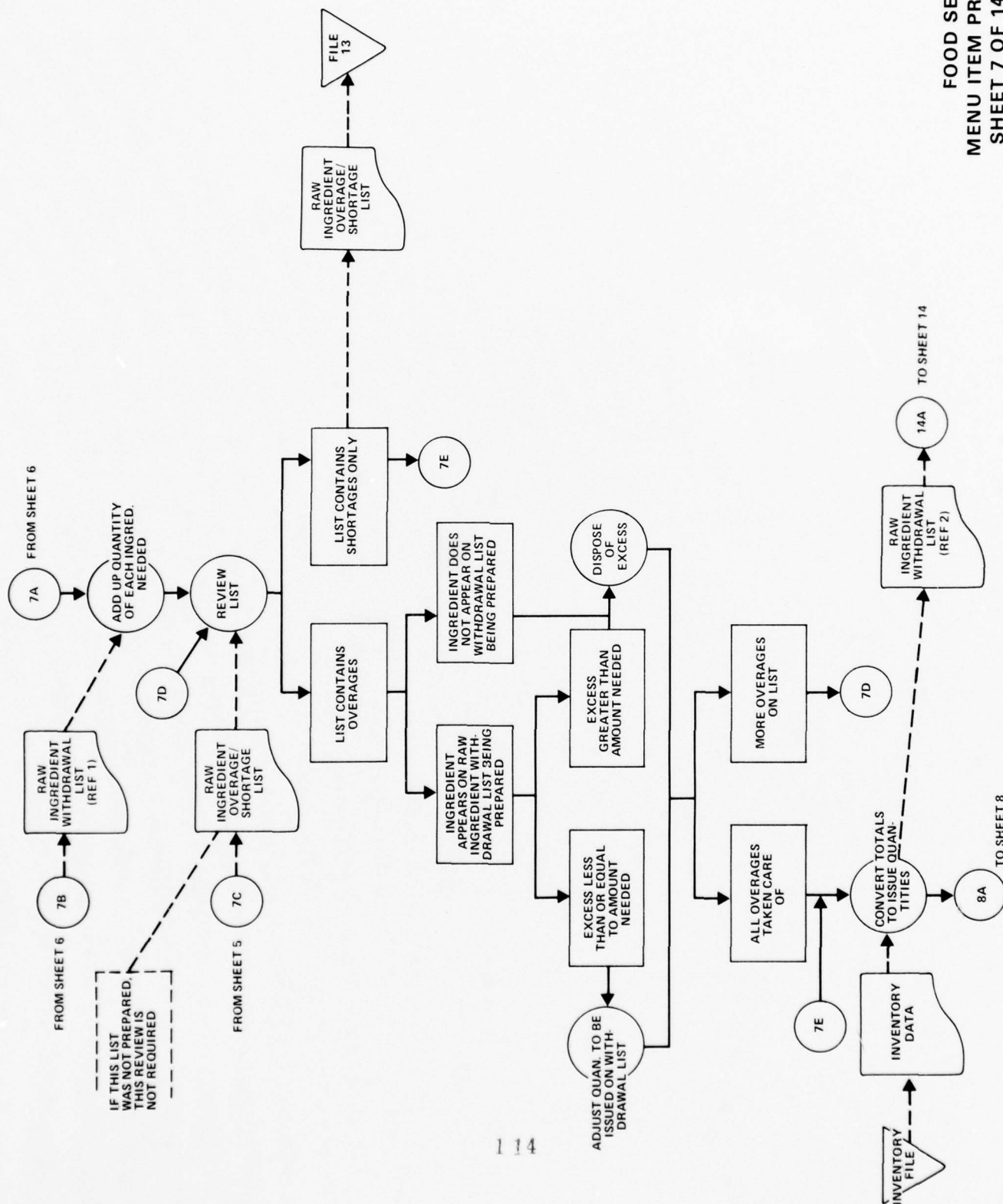


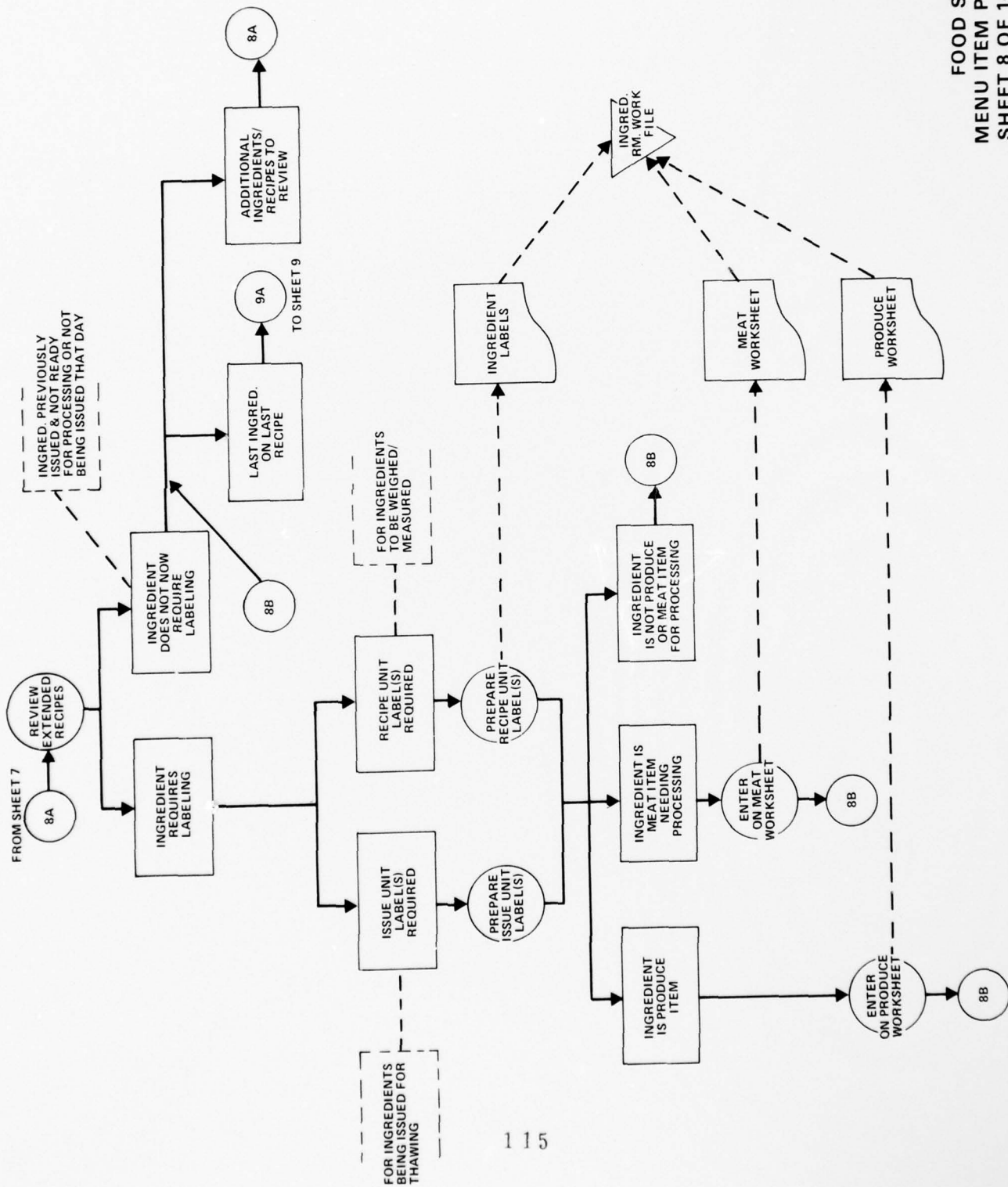




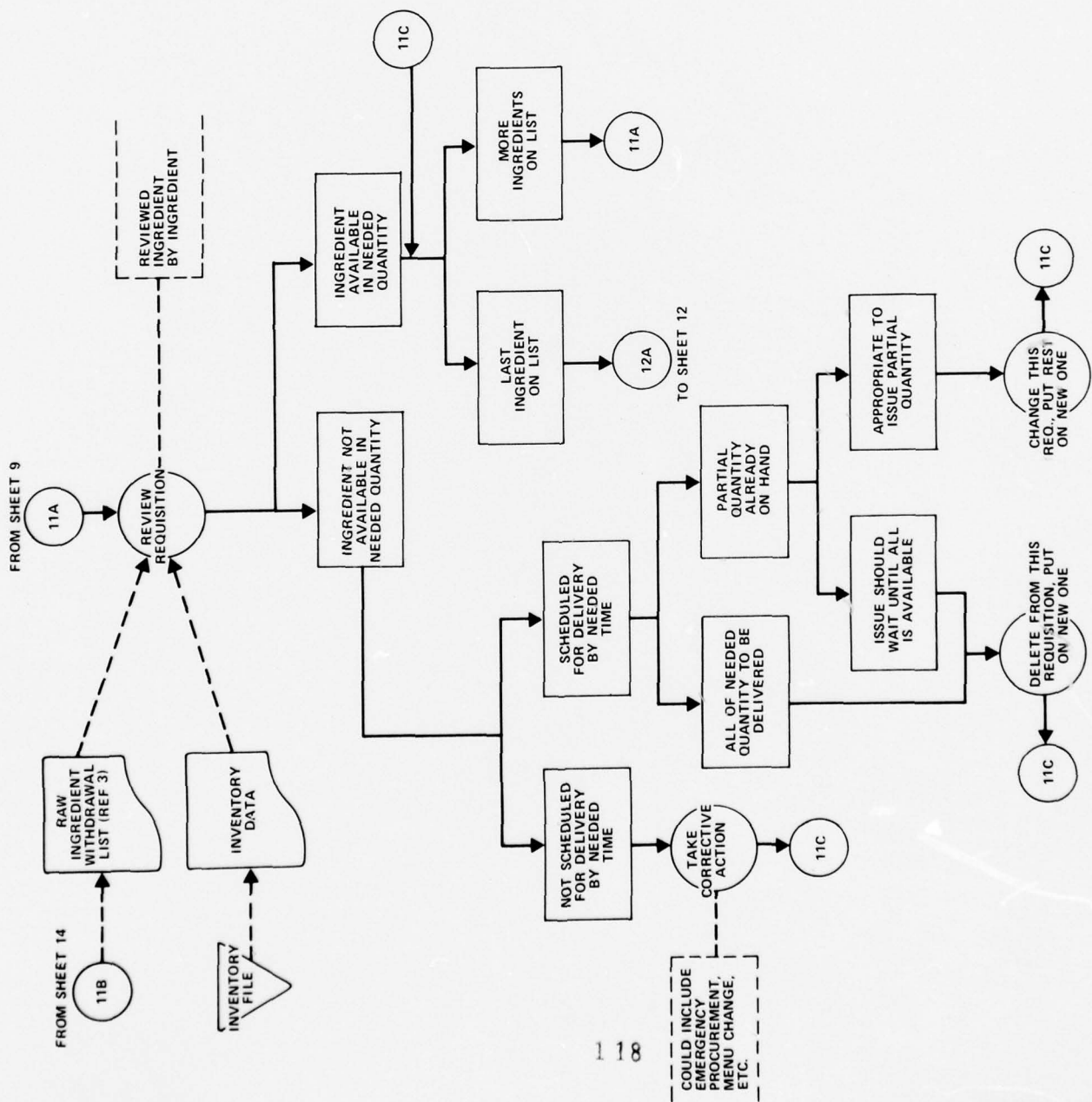


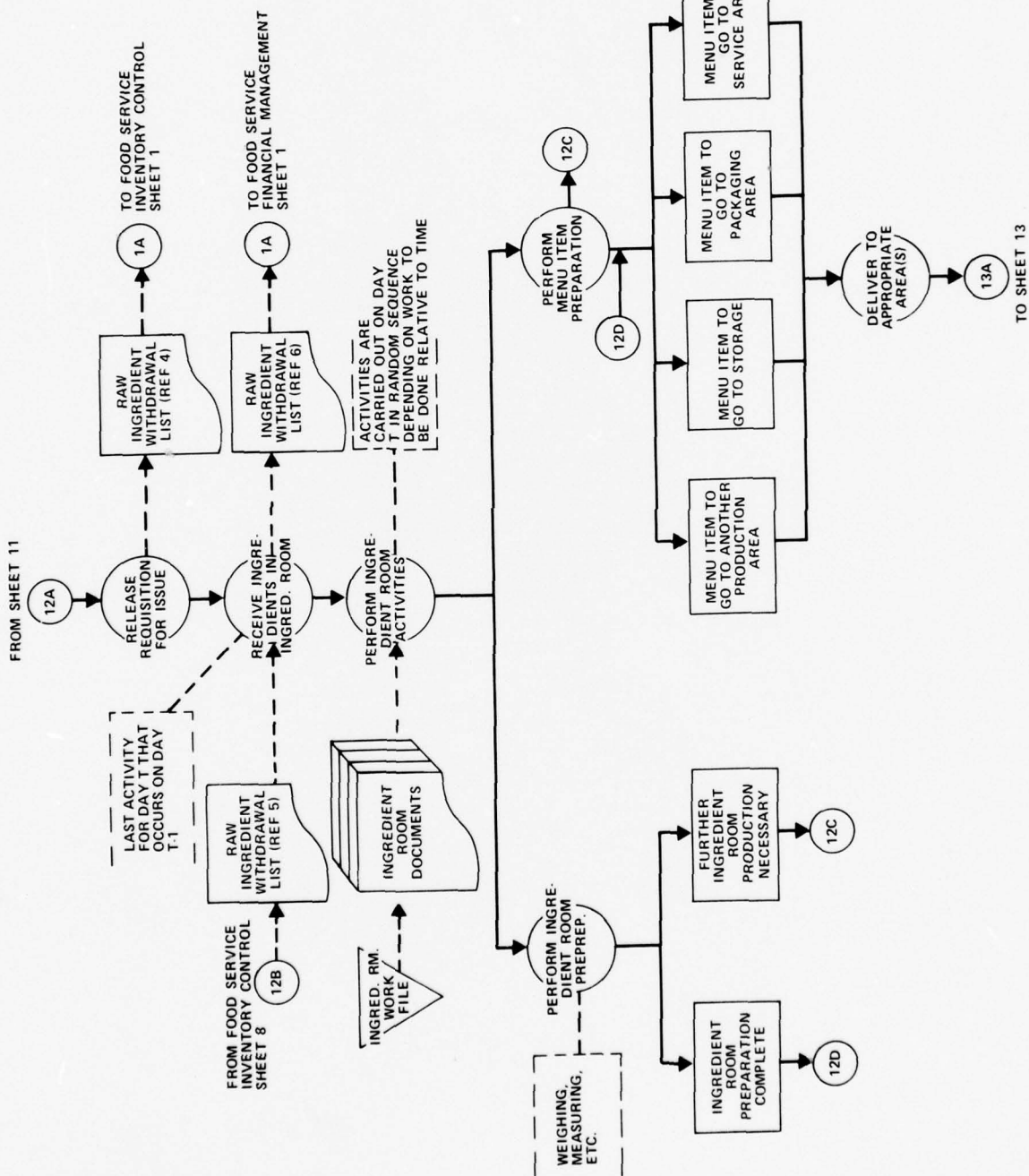


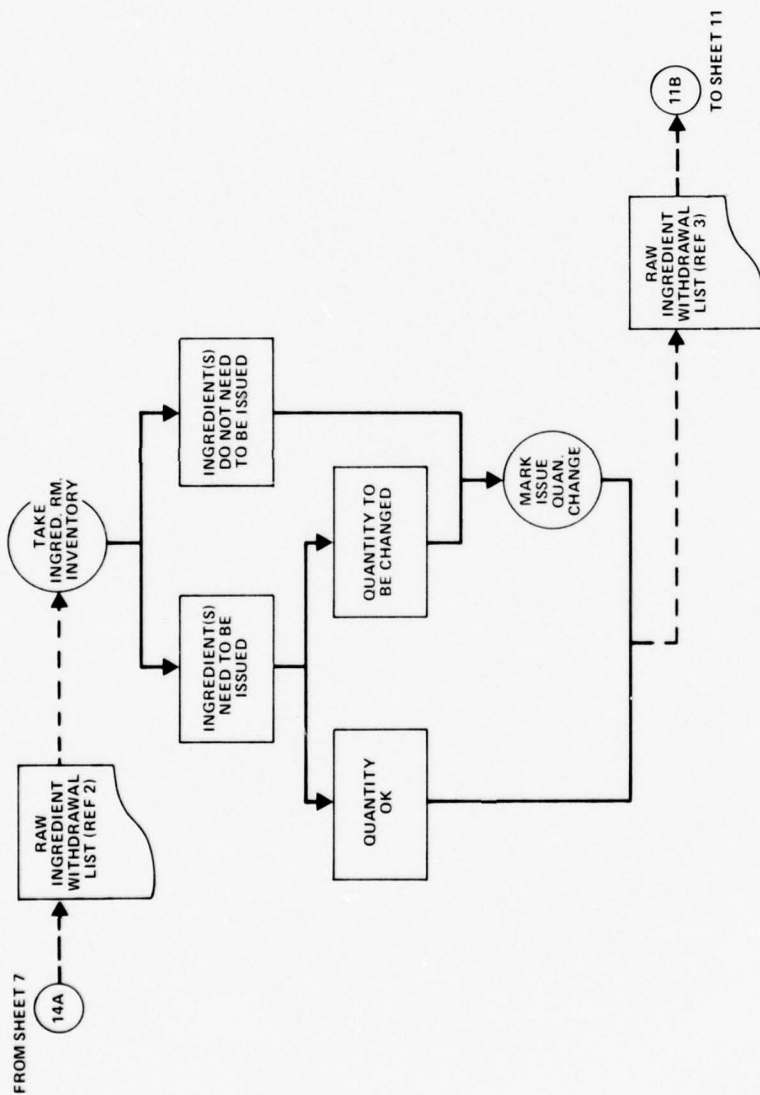




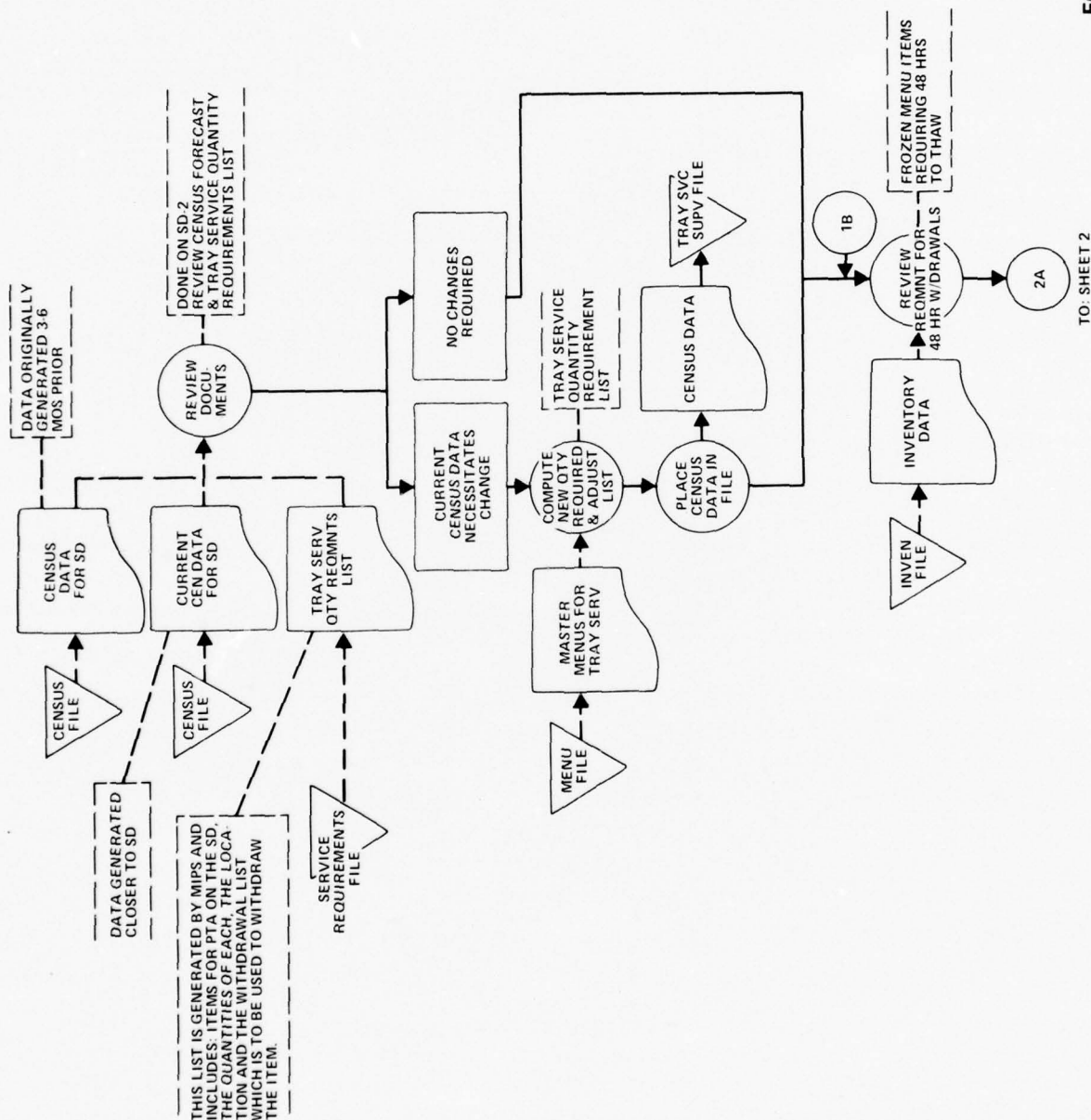




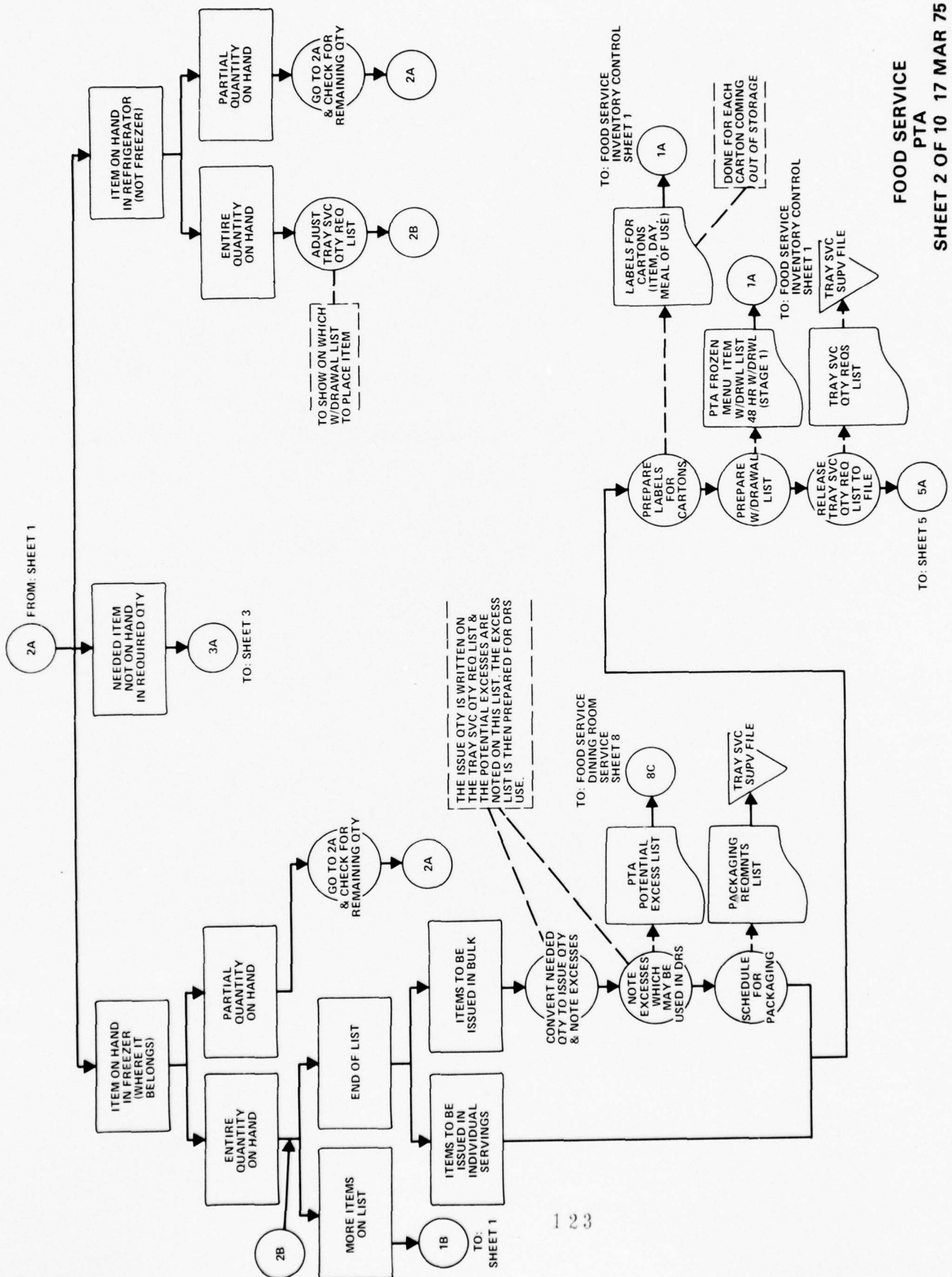


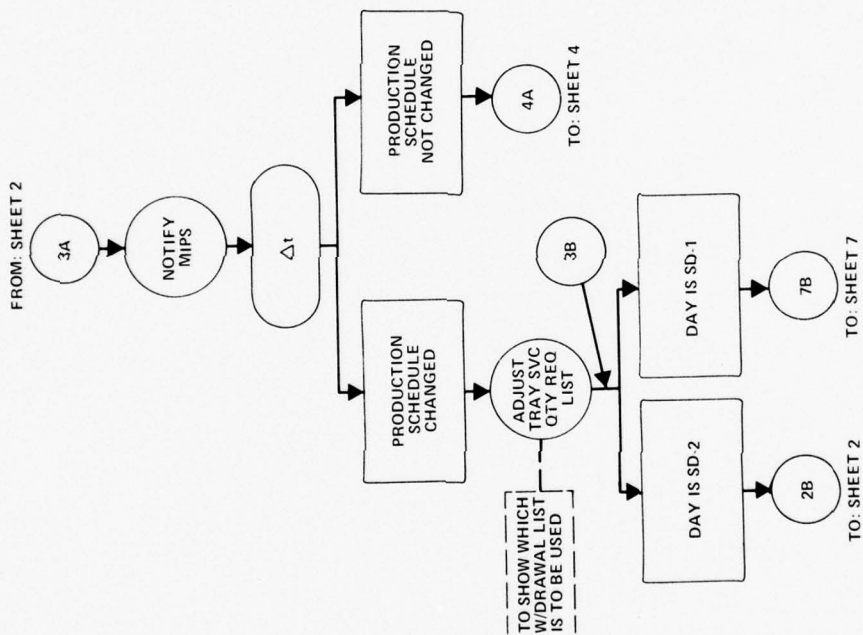


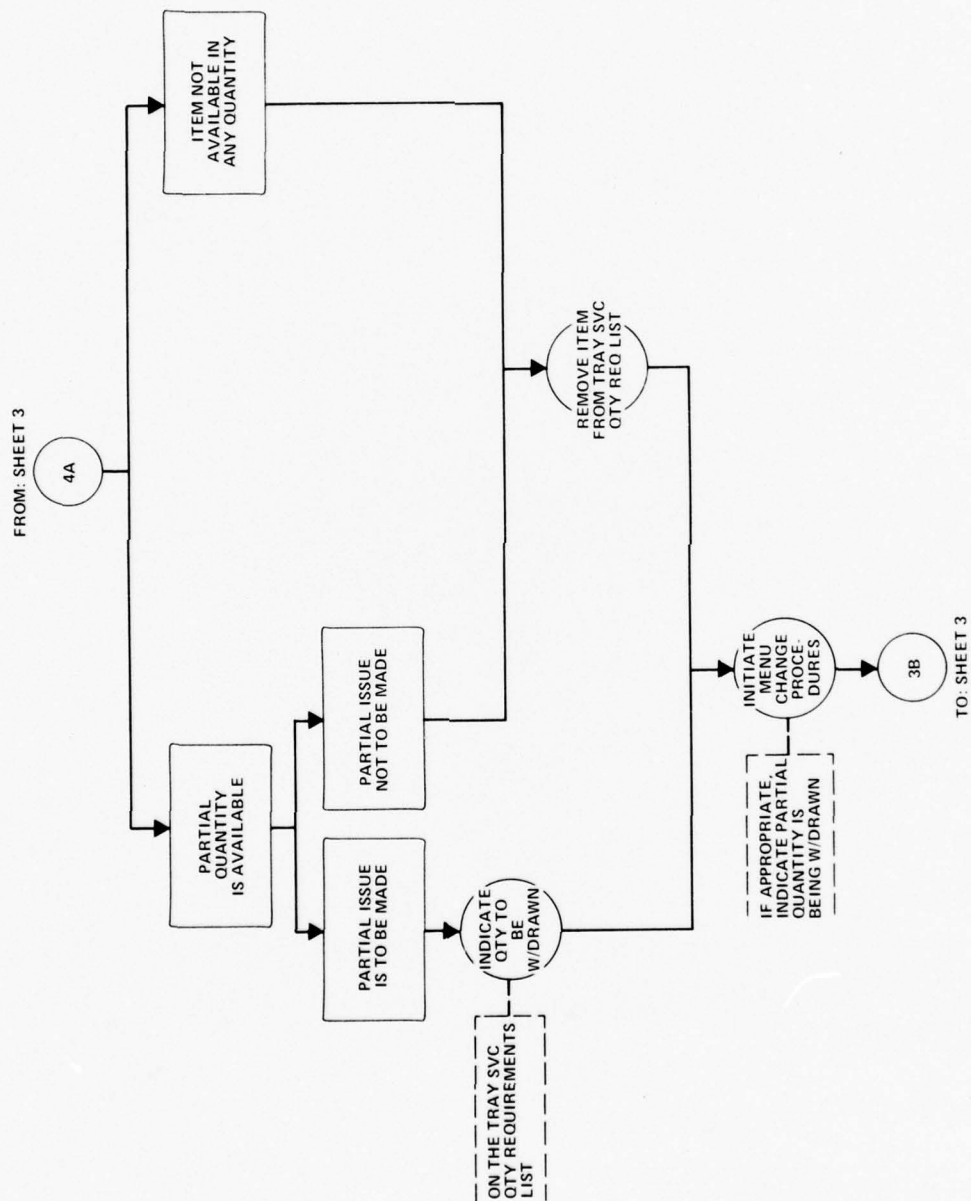
SD = SERVICE DAY

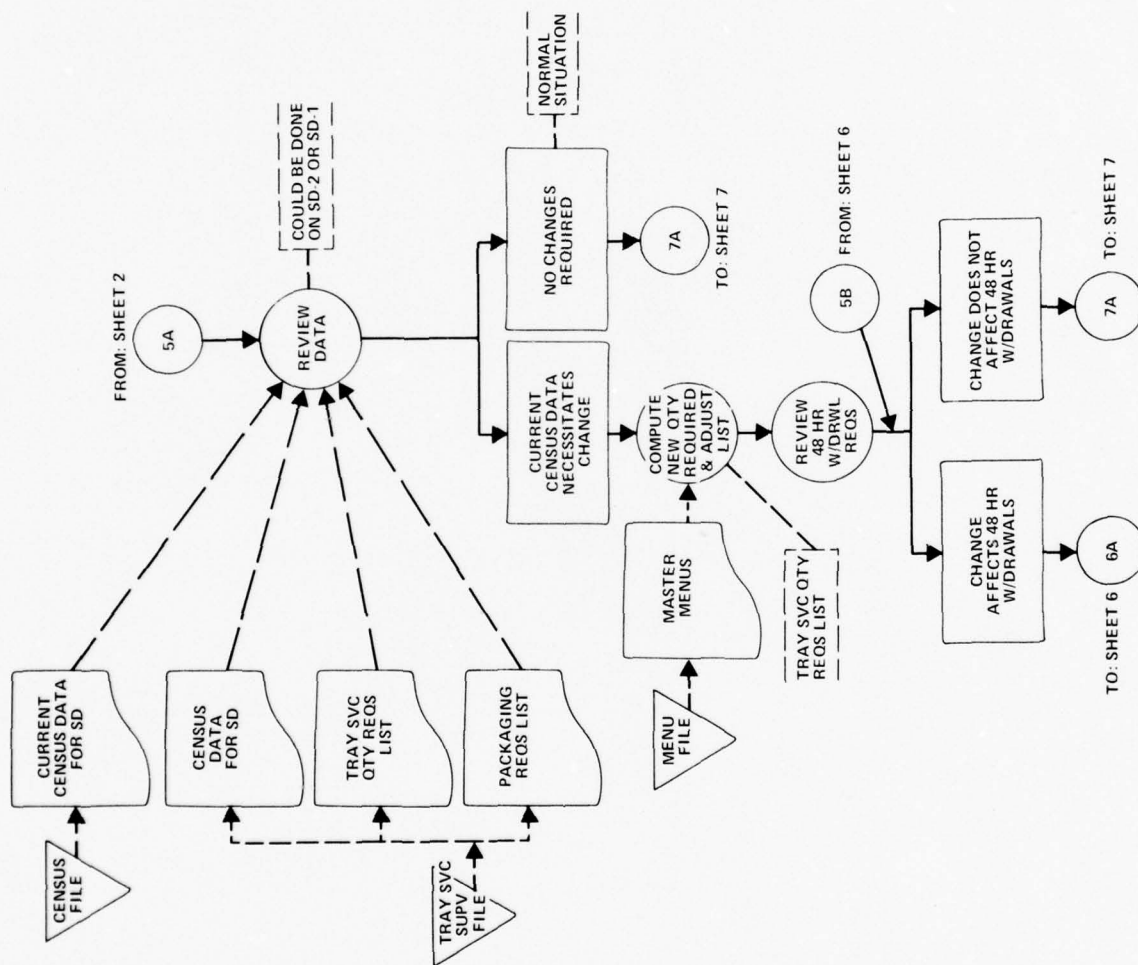


FOOD SERVICE
PATIENT TRAY ASSEMBLY
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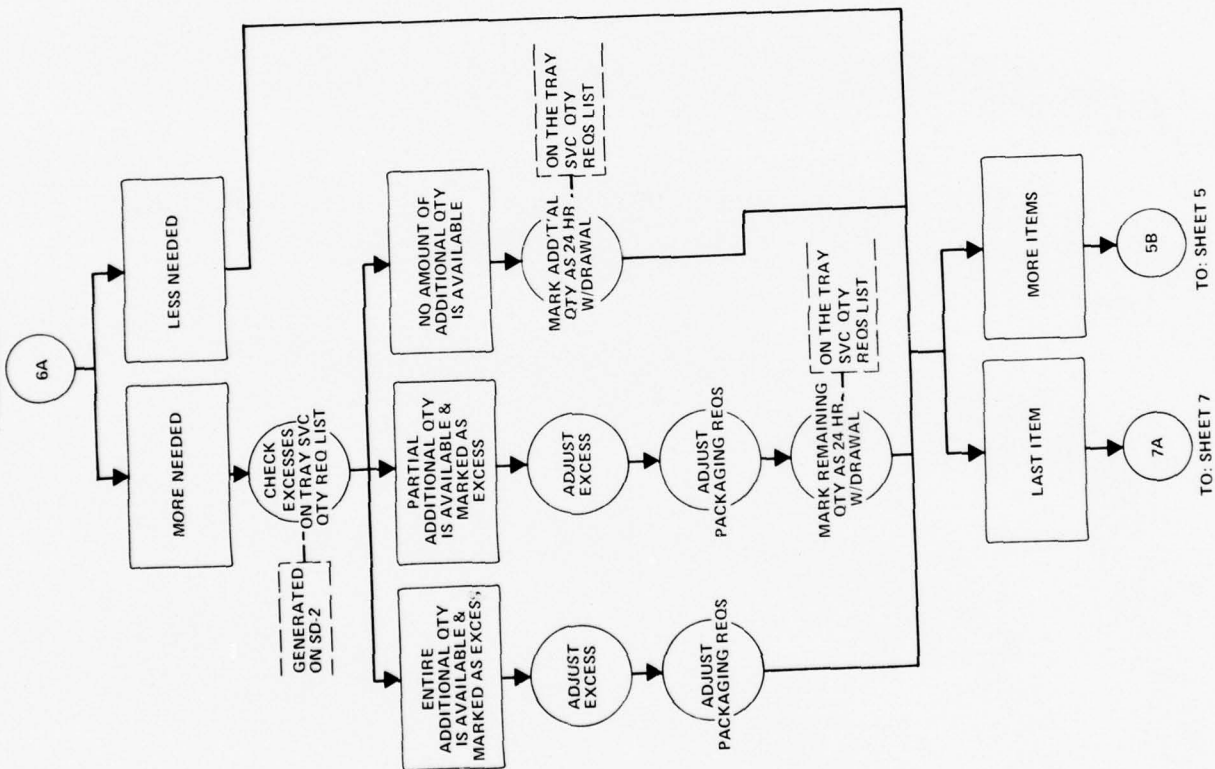






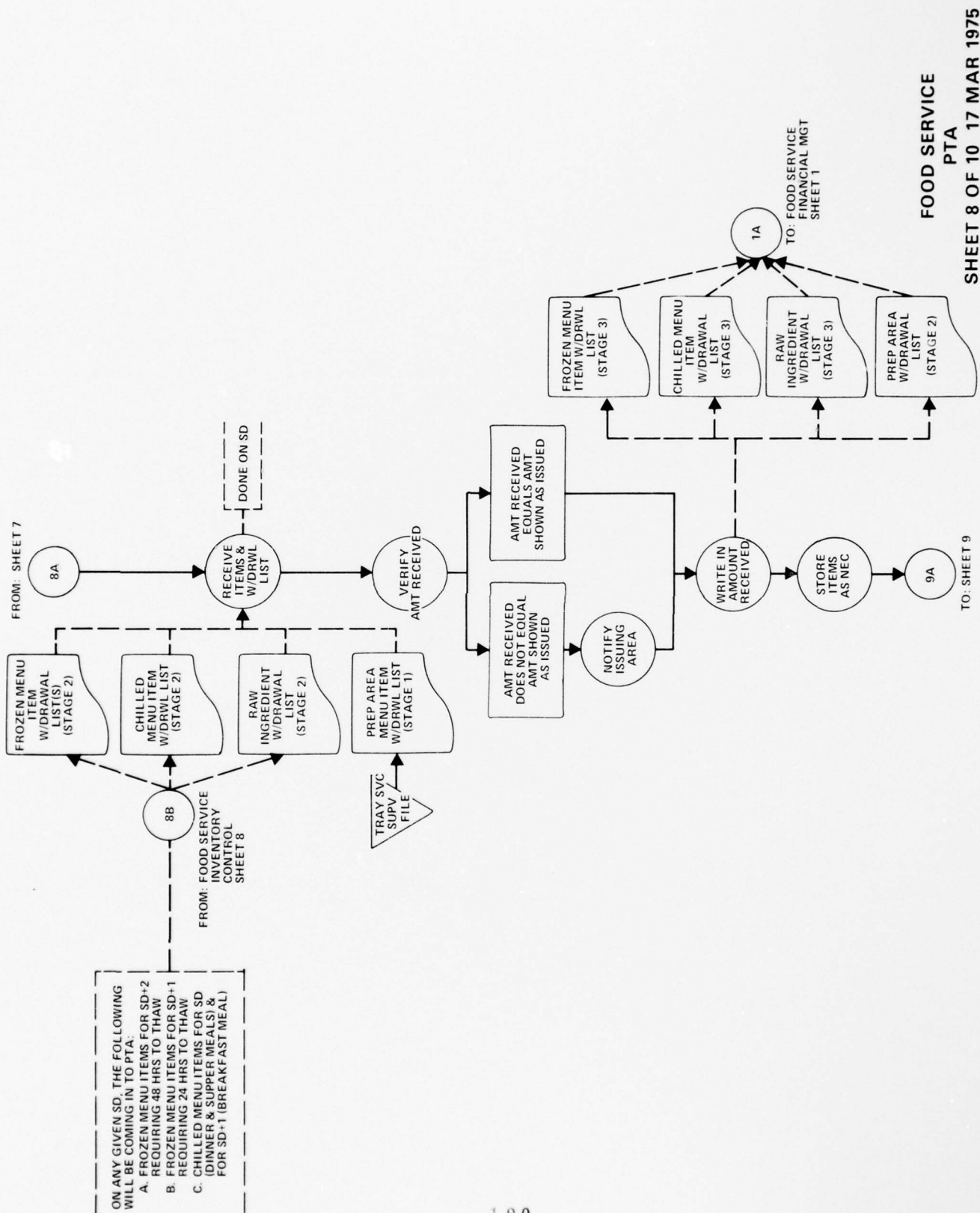


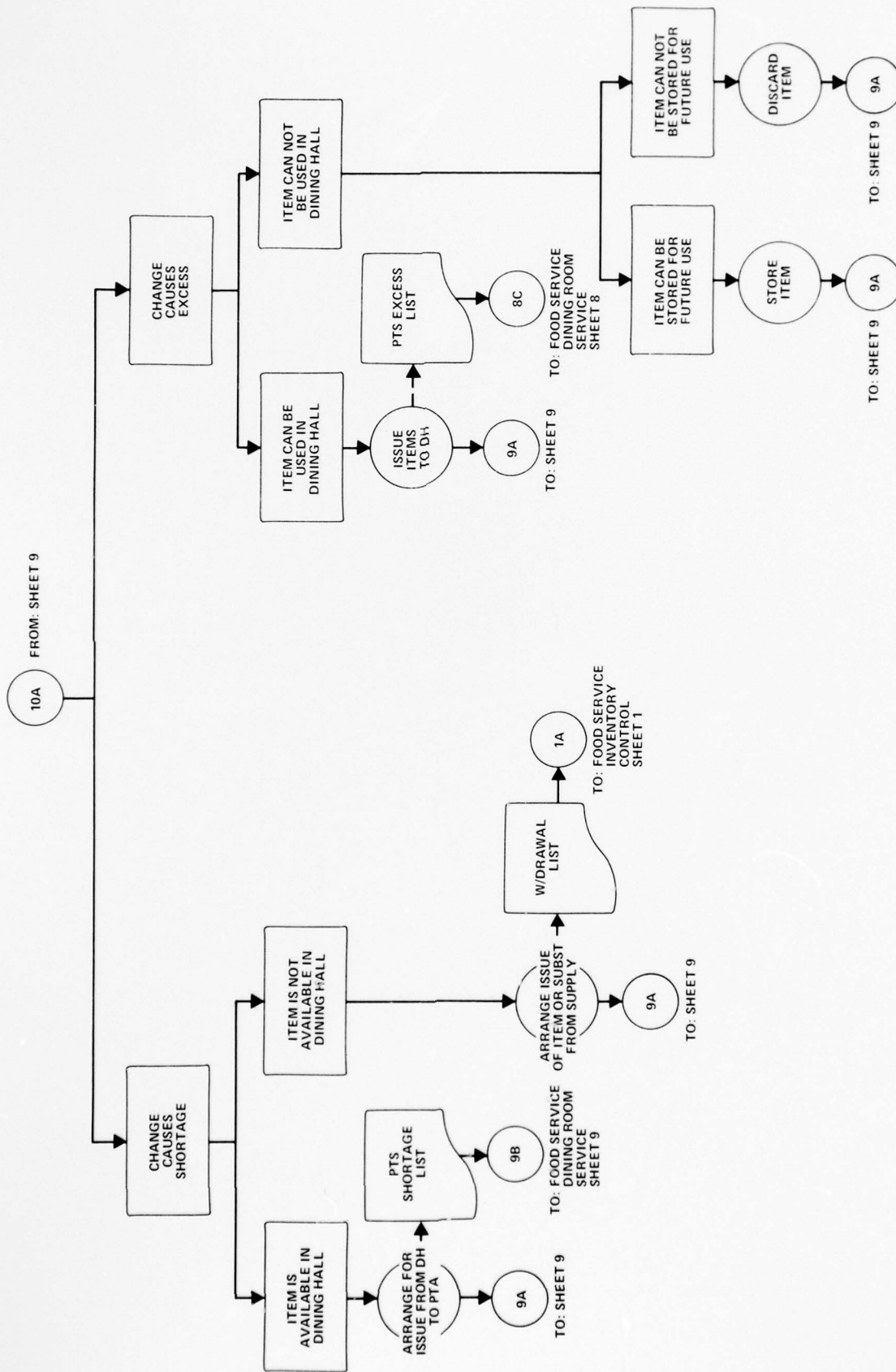
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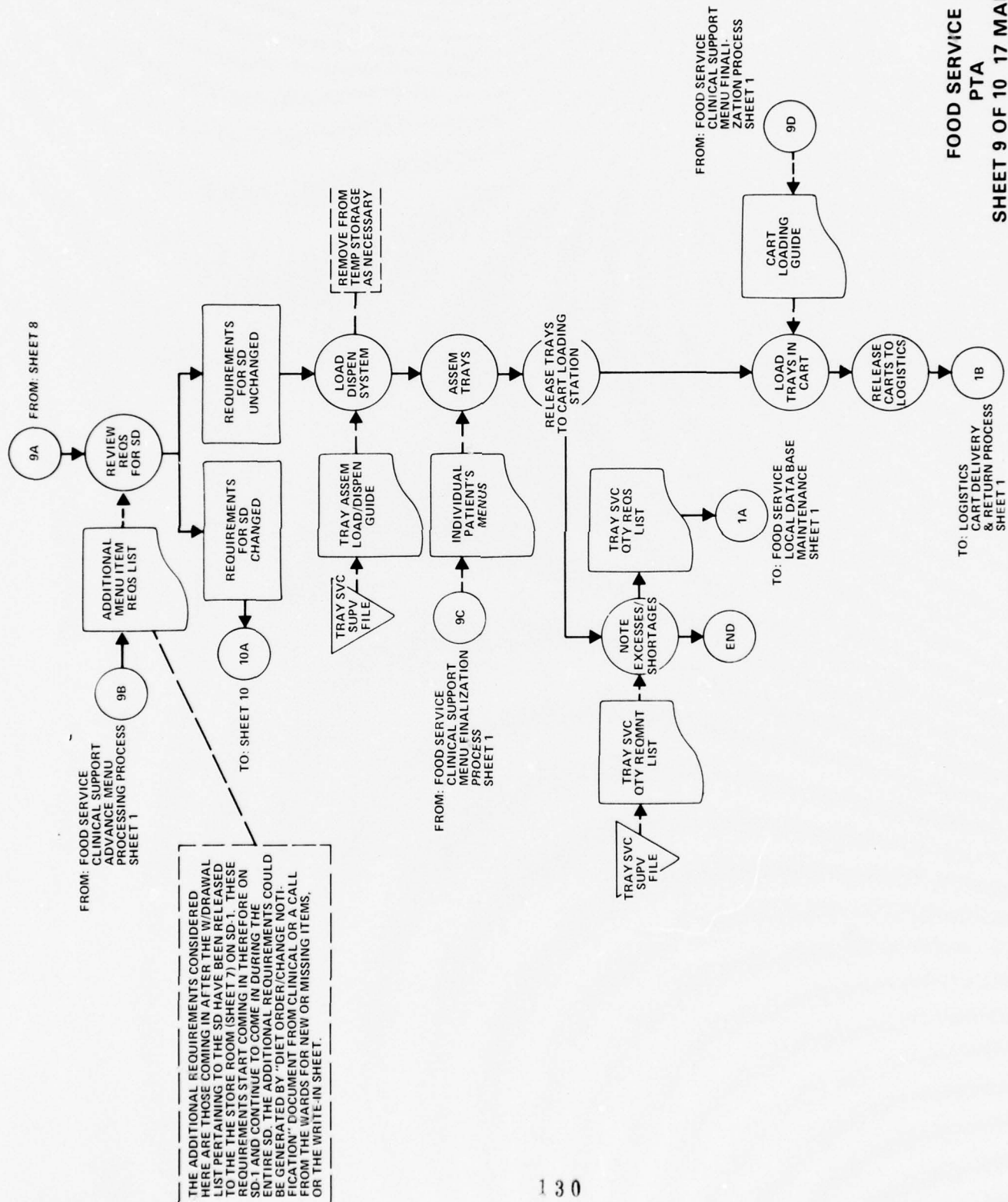


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PTA
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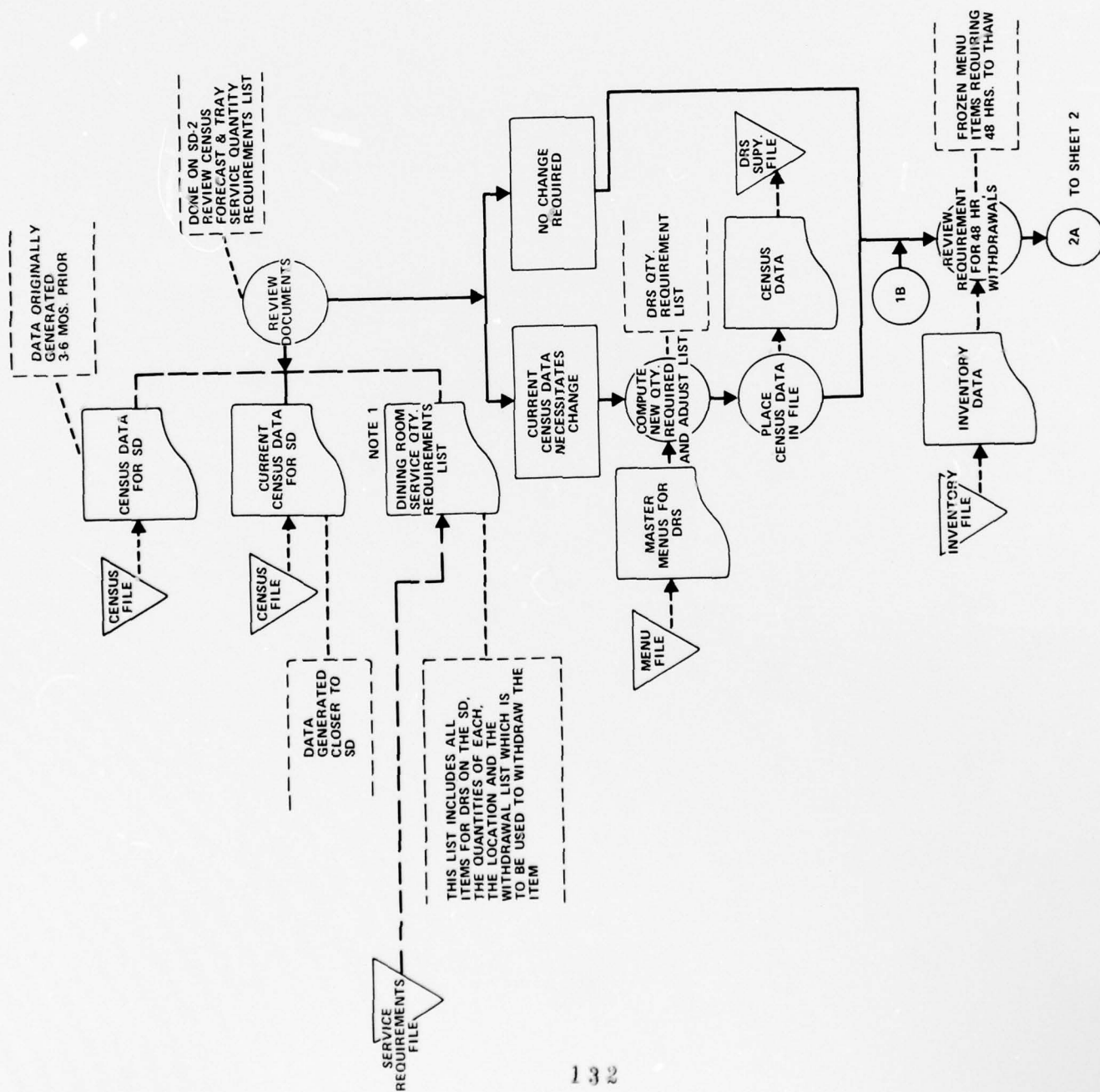


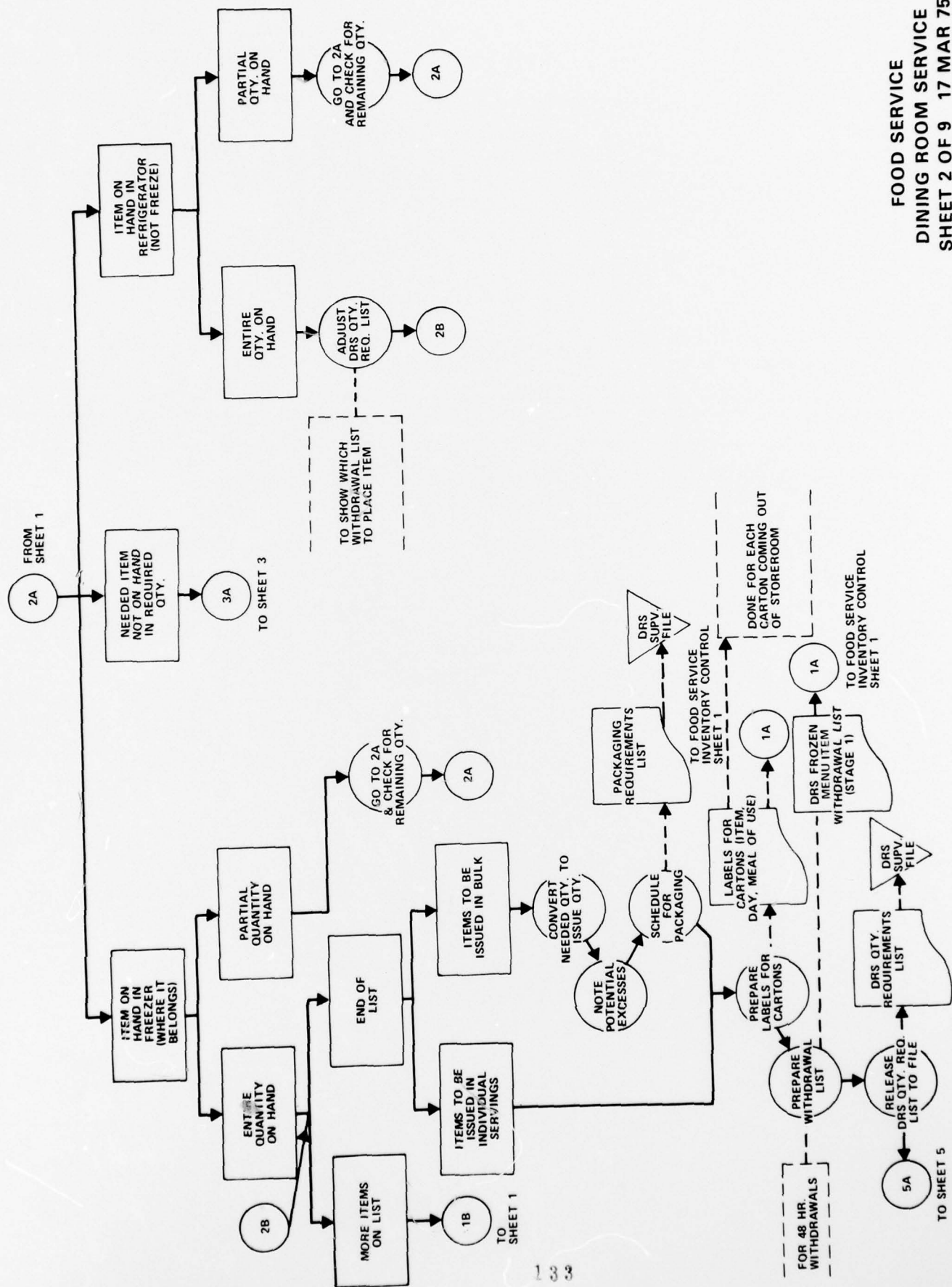


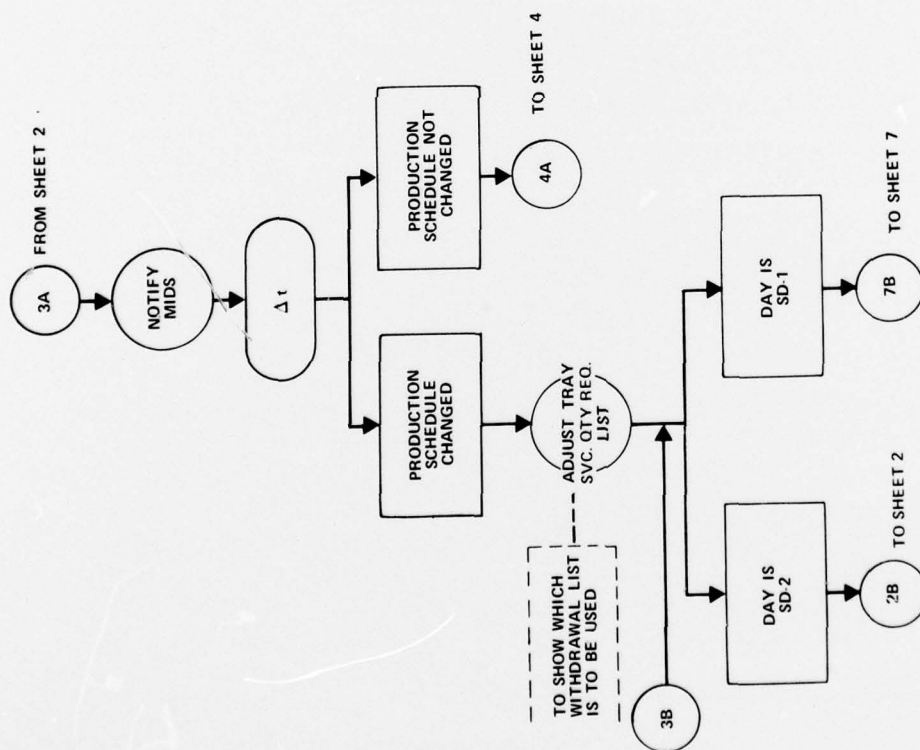




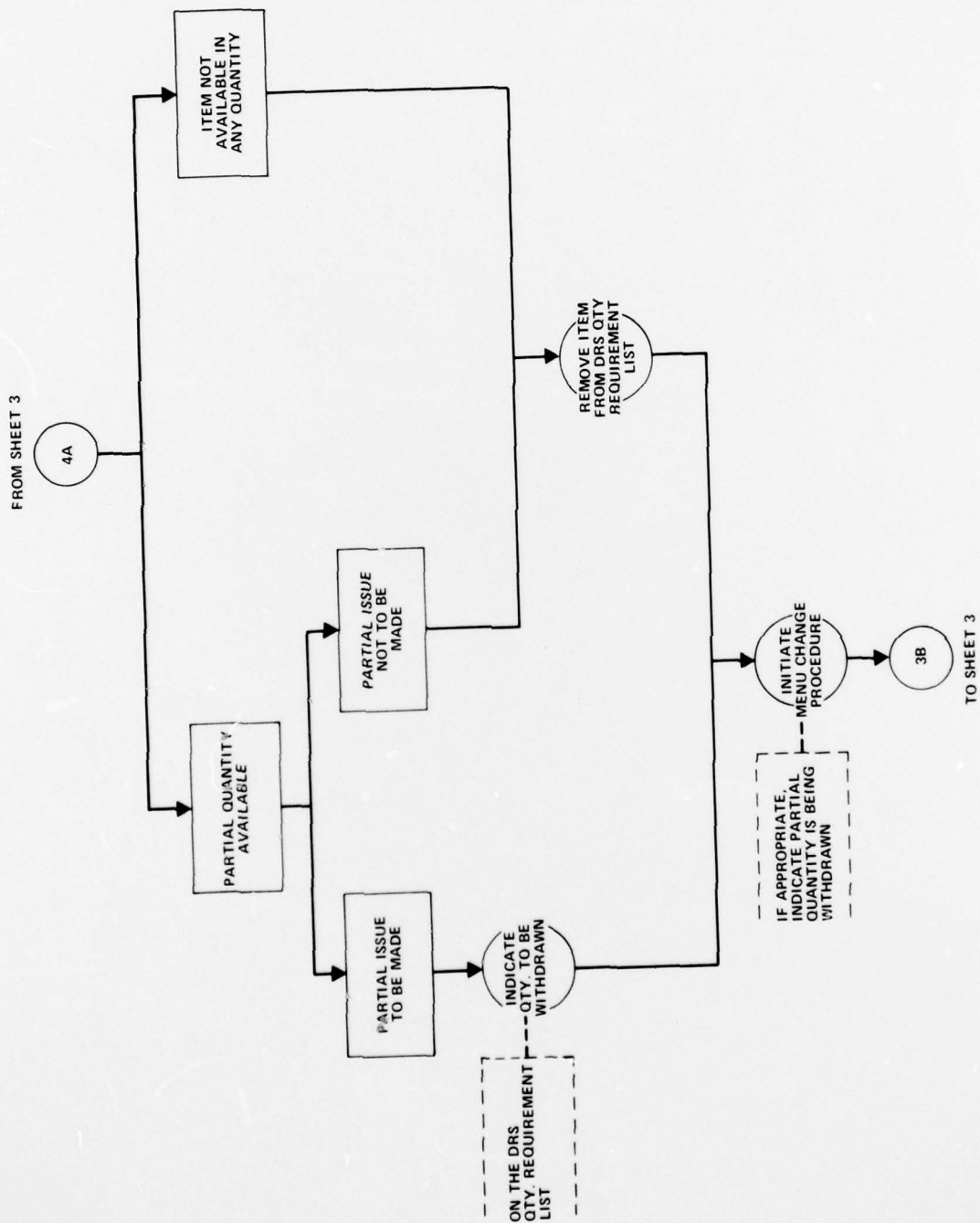
FOOD SERVICE
DINING ROOM SERVICE
SHEET 1 OF 9 17 MAR 75



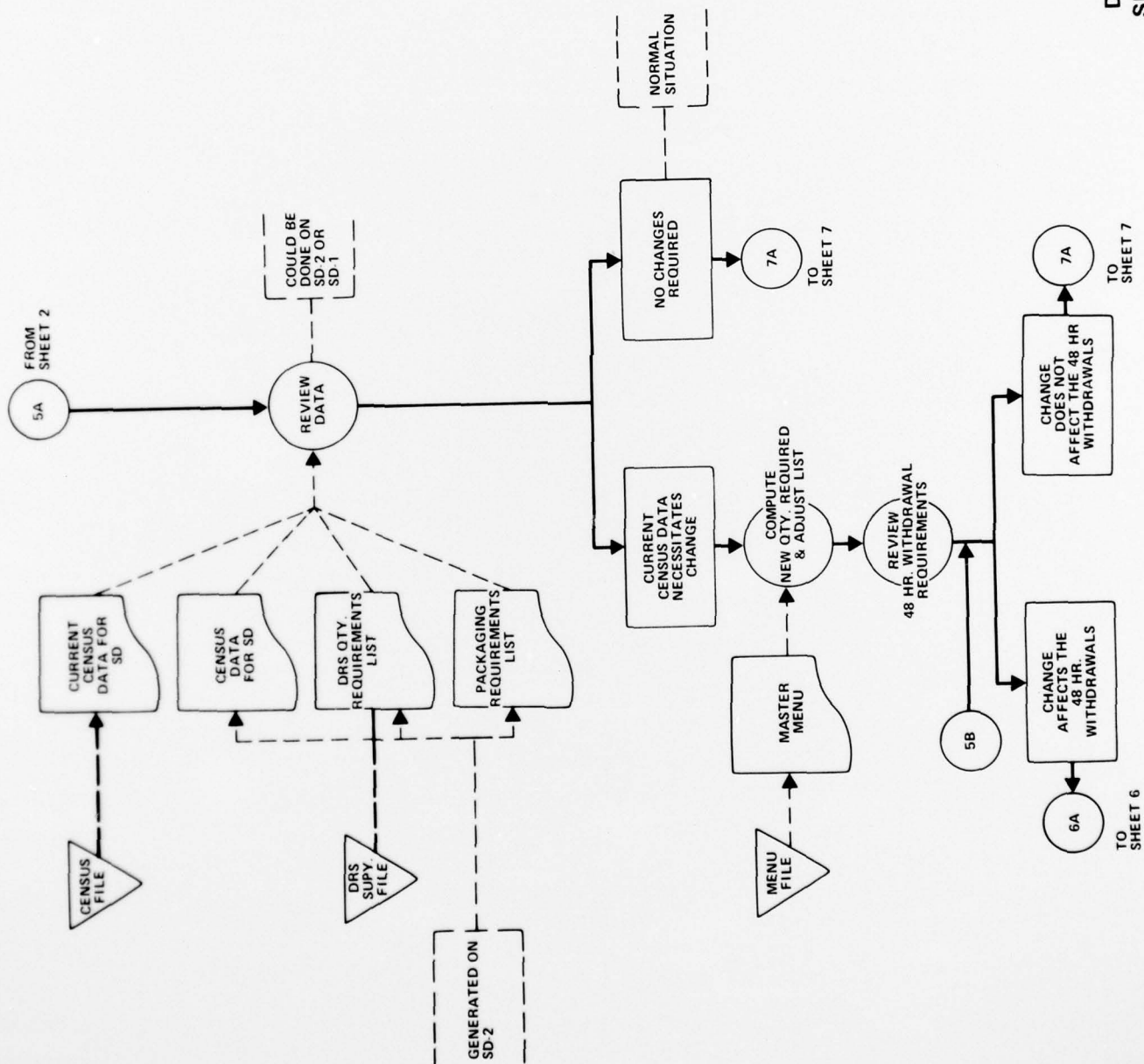


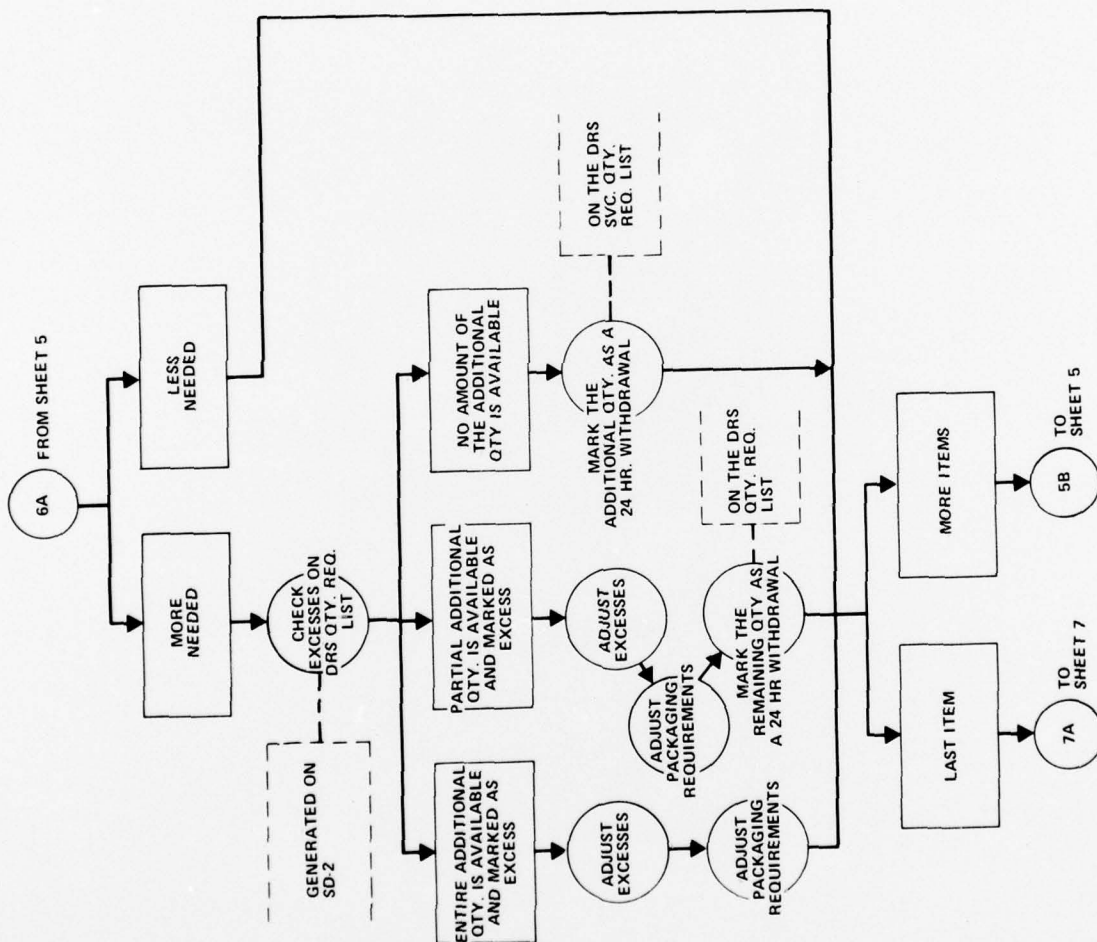


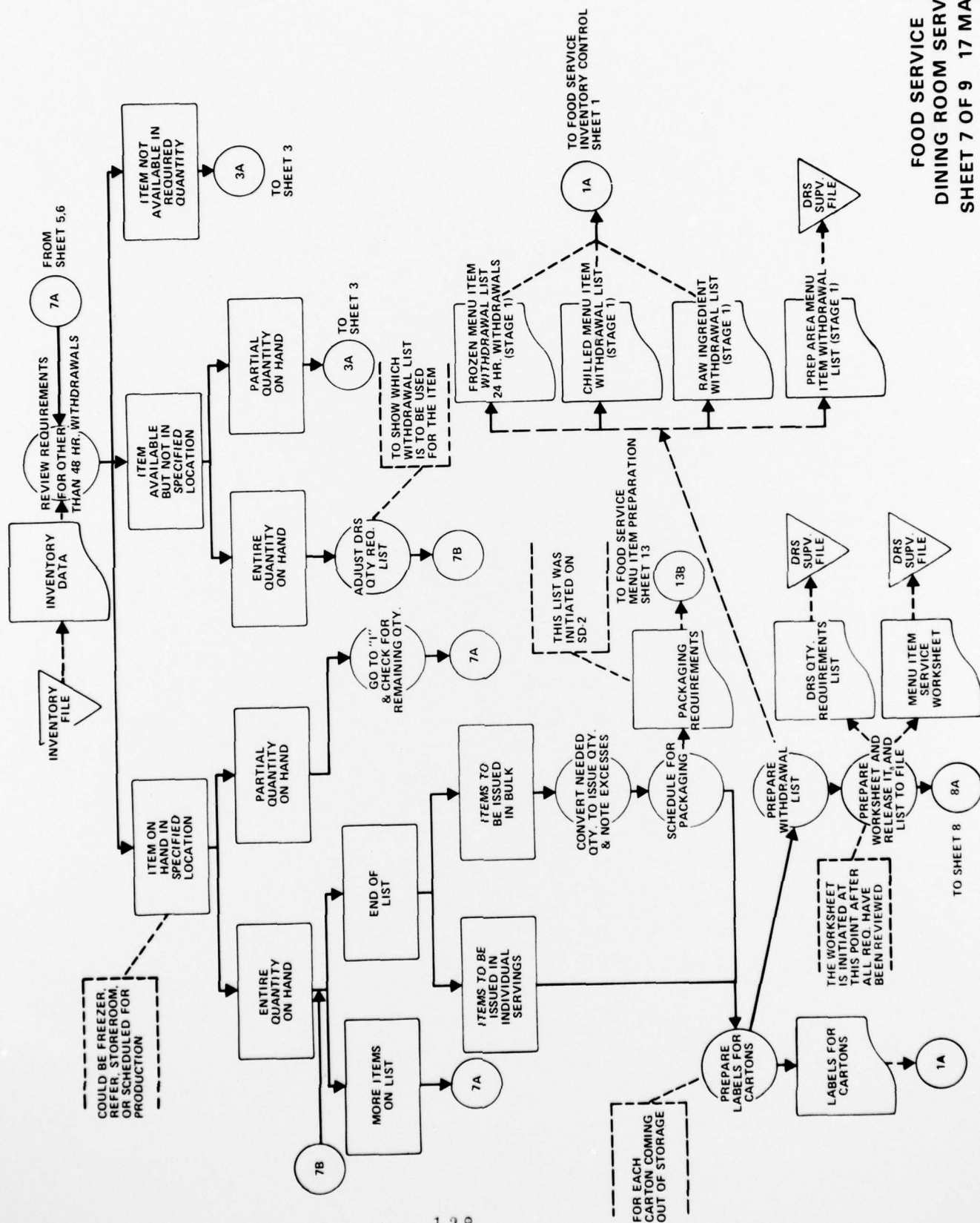
FOOD SERVICE
DINING ROOM SERVICE
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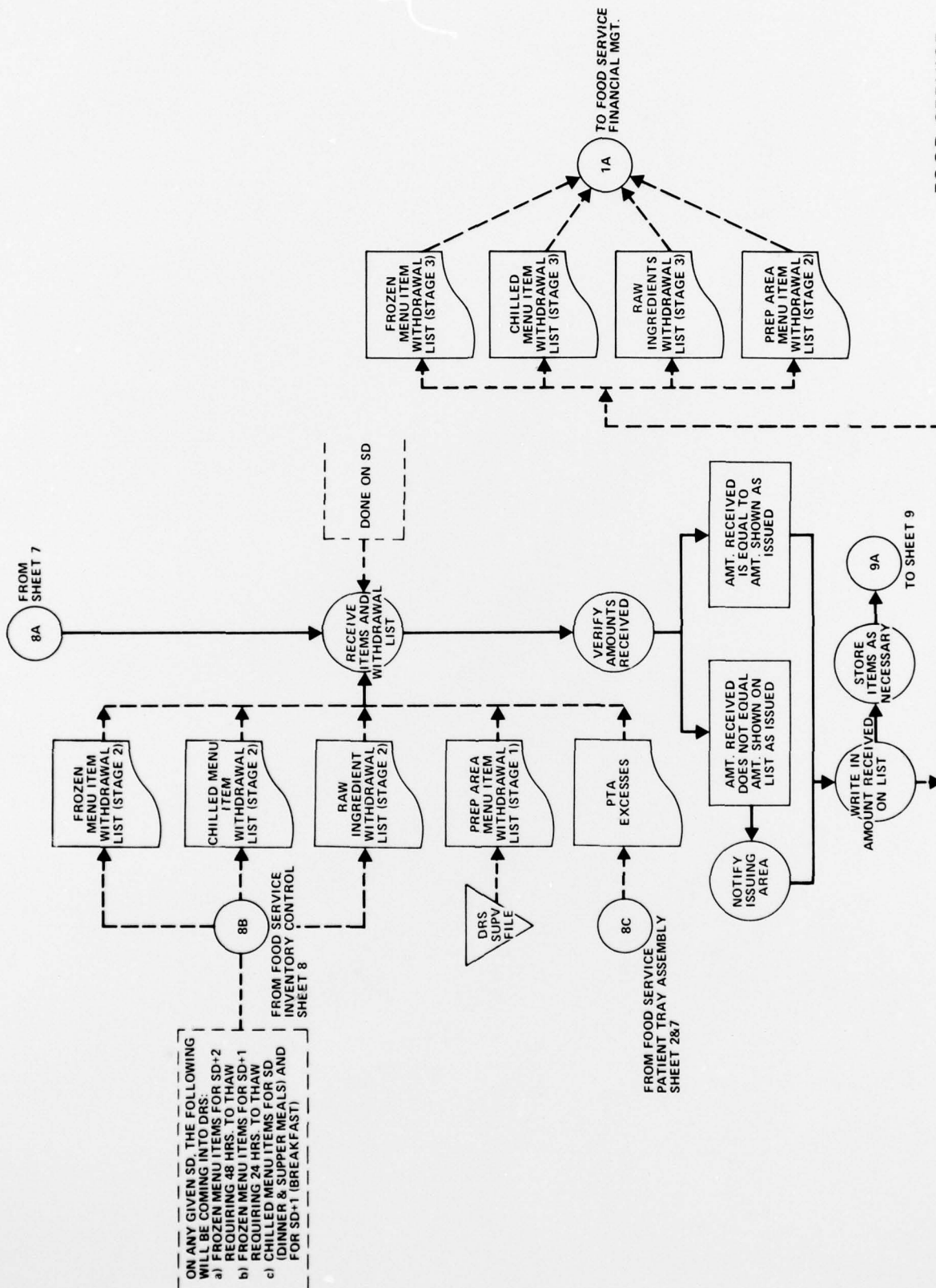
FOOD SERVICE
DINING ROOM SERVICE
SHEET 4 OF 9 17 MAR 75

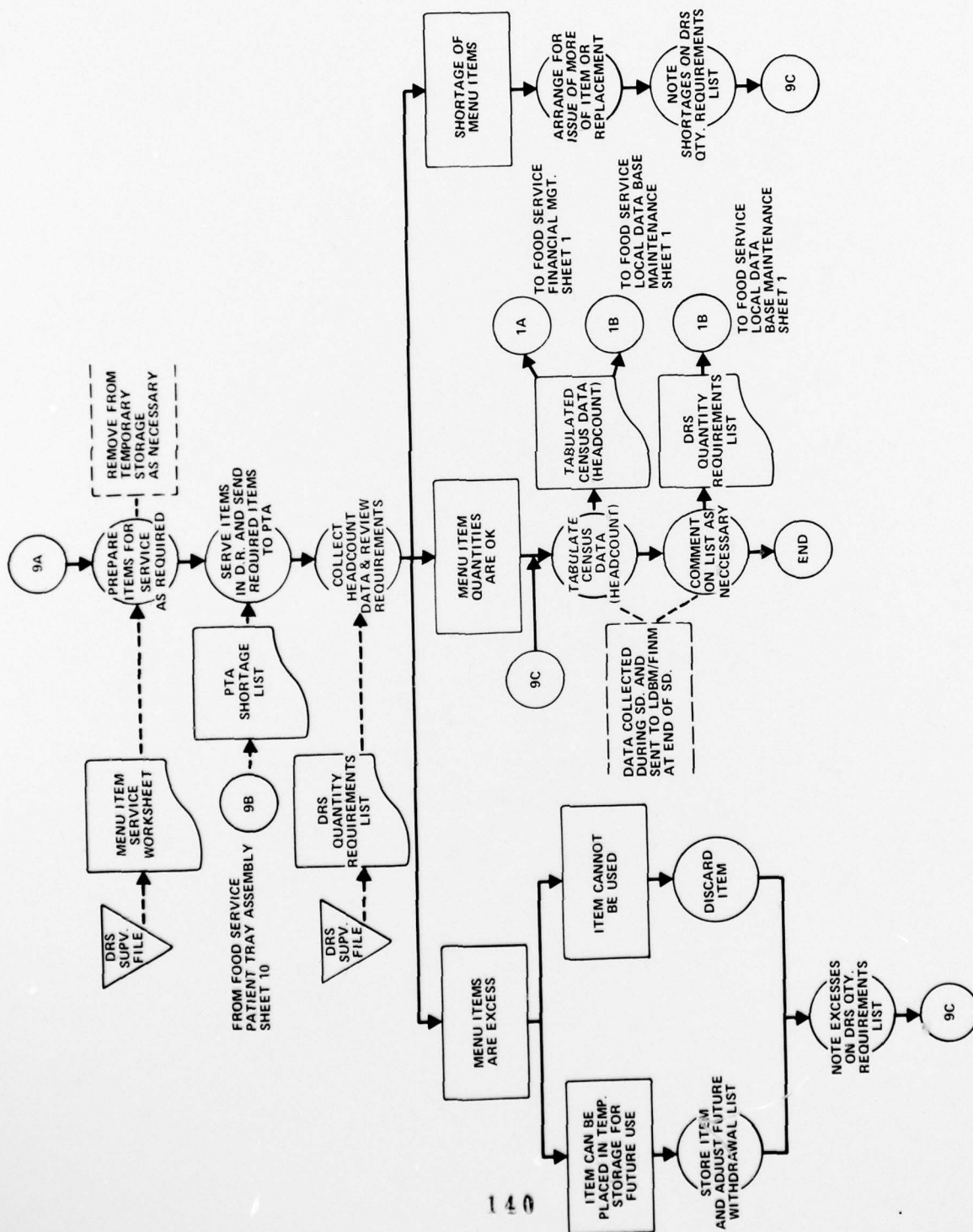






FOOD SERVICE
DINING ROOM SERVICE
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ABBREVIATIONS

AIR EVAC'D	air evacuated
AMIRL	additional menu item requirements list
AMT	amount
APPRO, APPROP	appropriate
APPT, APPTMNT	appointment
ASAP	as soon as possible
ASSEM	assembly
ATTEND, ATTDNT	attendant
AUTH	authorized
AWOL	absent without leave
BEG	beginning
CALC'S	calculations
CD	Clinical Dietetics
CDB	Central Data Base
CHNG	change
CLG	cart loading guide
COMMS	comments
CONT	control
COORD	coordinator
CP	care provider
CS	clinical support
DEL	delivery
DETERM	determine
DH	dining hall
DIET	dietetic
DISPEN	dispensing
DOCU	document
DRS	dining room service
DUP	duplicate
EQUIP	equipment
EVALU	evaluation
EXP, EXPIR	expiration
FINM	Financial Management
FS	Food Service
HOSP	hospital
HX	history

ABBREVIATIONS cont.

IC	Inventory Control
ID	identification
INFO	information
INDIC'D	indicated
ING, INGRED	ingredient
INIT	initiate
INSTR, INSTRUC	instruction
INV, INVEN	inventory
LDBM	Local Data Base Maintenance
LOC	location
LOG TECH	logistics technician
MAINT	maintenance
MAX	maximum
MED	medical
MGR	manager
MGT	management
MIN	minimum
MIP	menu item preparation
MIPS	menu item preparation scheduling
MIQRL	menu item quantity requirements list
MOD	modification
MSTR	master
NDG	nourishment delivery guide
NEC, NECES	necessary
NOUR, NOURMNT	nourishment
NPO	nothing by month
NUTR	nutritive
ORIG	original
PAD	Patient Administration Division
PAS	Patient Appointment and Scheduling
PERS	personnel
PERT	pertinent
PHY, PHYS	physical
PKG	package
PMI	prepared menu item
POTEN	potential
PREP	preparation
PROC	process
PROD, PRODOC	production
PS	production schedule
PT, PTN	patient
PTA	patient tray assembly

ABBREVIATIONS cont.

QC	Quality Control
QTY, QUAN	quantity
RAND	random
RDING	recording
REFRIG	refrigerator
REQ	request; requisition
REQ'D	required
REQMNT, REQ	requirement
RM	room
SAMP	sample
SCHED	schedule; scheduled
SD	service day
SELEC(s)	selection(s)
SHT	sheet
SI	seriously ill
SOP	Standing Operating Procedure
SPEC	special
SPECS	specifications
STOR	storage
SUPR	supervisor
SVC	service
SYS	system
TEMP	temperature; temporary
TRANSAC	transaction
VAL	value
VSI	very seriously ill
W/	with
W/DRAWAL, W/DRWL	withdrawal
W/in	within
W/O	without
Δt	time elapsed

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